TECHNOLOGY DEPT.

PUBLIC LIBRARY
JUN 16 1952
DETROIT

NEW EQUIPMENT DIGEST

A Penton Publication

June, 1952
Volume 17—Number 6

Copyright 1952 by Equipment Digest Publishing Co.

CHECK AND PASS ALONG

✓	NAME	See No.

Use Inquiry Slips—Pages 8 and 104

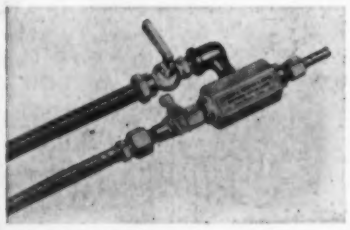
EQUIPMENT • MATERIALS • PROCESSES • DESIGNS • APPLICATIONS • LITERATURE

STOPWATCH-REVOLUTION COUNTER checks rotating speeds accurately

Speeds of motors, rotating shafts and similar rotating objects can be determined accurately with this combination stopwatch and revolution counter. Rubber tip is held lightly against end of revolving shaft. Slight additional pressure engages counter and stopwatch simultaneously. Number of revolutions can be obtained for any desired time interval. Resetting of counter to zero winds stopwatch. Suggested running time is 60 seconds at speeds to 5000 rpm. Made by **Montgomery & Co.**, 60 Murray St., New York 7, N. Y.

▲ For more details circle **NED-5000** on enclosed inquiry slip ▲

LUBRICATION-COOLANT SYSTEM uses air jet to atomize liquids



Effective cooling and lubrication of cutting tools is attained by Atom-Lube system which increases tool life and cutting speeds and improves cutting quality. Operated by existing industrial air lines or small air compressors, system uses powerful air jet to atomize any cooling or lubricating liquid from water to heavy machine oil. Savings in coolant consumption is claimed. Flexible nozzle permits vapor spray to hit the cutting tool edge at the most effective angle. Device is supplied with mounting bracket, 6 and 12-in. matched nozzle tubes, 4 ft of ¼-in. ID coolant hose and ¼-in. SPS nipple for air connection. Made by **Henry G. Thompson & Son Co.**, Chapel & Mill Sts., New Haven 5, Conn.

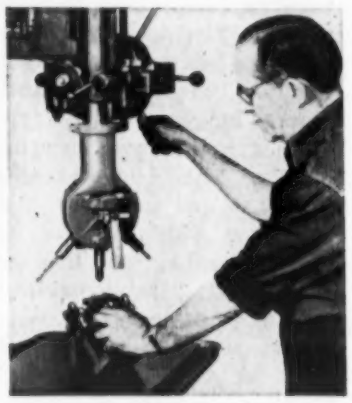
▲ For more details circle **NED-5001** on enclosed inquiry slip ▲

HAND SCREW MACHINE has 16 spindle speeds

Range of slow spindle speeds for heavy roughing operations and exceptionally fast spindle speeds for small diameter, close tolerance work are incorporated in this 10-in. hand screw machine. Speeds offered are from 184 to 3796 rpm in 16 different steps. Spindle is powered by a 1-hp, two-speed, instant-reversing motor. Tapered roller bearings are used in the headstock. All castings are normalized to prevent warpage. Length of bed to headstock is 31½ in. Spindle nose to turret face distance is 18⅞ in. Spindle has No. 5 Morse taper, 1 7/16-in. ID and accommodates work of 1-in. diameter with bar type collet closers and 1⅜ in. with nose type collet closers. Globe self-indexing bed turret and heavy duty cross slide are standard. Made by **Globe Heat-Seal, Inc.**, 3372 S. Robertson Blvd., Los Angeles 34, Calif.

▲ For more details circle **NED-5002** on enclosed inquiry slip ▲

THREE-SPINDLE TURRET HEAD can be attached to drill presses



Sequence drilling, countersinking and tapping can be performed on a single drill press spindle by the Select-A-Spindle turret head with three spindles. Tool provides a selection of speeds on each spindle for specific operations at recommended speeds. Capacity of all spindles is ⅜-in. Adjustable torque control spindles for protection of taps up to ¼-in. can be supplied for any or all spindles. Hand lever indexing is accomplished without stopping drill press motor. Unit incorporates a variation of the Commander spring clutch tapper and is built to tap on any one, two or all three spindles. Made by **Commander Mfg. Co.**, 4221 W. Kinzie St., Chicago 24, Ill.

▲ For more details circle **NED-5003** on enclosed inquiry slip ▲

SNAP-ACTION SWITCH has plunger on right or left side

Capacity to make or break steady currents of 20 amp and ability to handle inrush currents as high as 75 amp are designed into BAF1-2RQ9-LH or -RH snap-action switch. Last two letters denote left or right side location of roller plunger actuator for operation by cams with rise up to 30 degrees. Plunger can be turned to any position to align it with cam. Die cast aluminum enclosure offers protection against vibration, shock, dust, dirt, oil and moisture. Single-pole, double-throw switches are offered in various ratings and have 2½-lb maximum operating force and ¾-lb minimum release force. Made by **Minneapolis-Honeywell Regulator Co.**, Micro Switch Div., 205 S. Chicago Ave., Freeport, Ill.

▲ For more details circle **NED-5004** on enclosed inquiry slip ▲

To Save Your Time

We have done it again! A distinct improvement has been made in the readability of New Equipment Digest. The size of the type has been increased so as to make it easier for you to read the factual data that are given on hundreds of new and improved products each month. Both your eyes and your time will be saved.

Editorially, we will continue to digest all the data to conserve your reading time. As always, essential facts will be given on products to help you determine quickly if they meet your needs. This carefully considered change in the size of type is just another step in keeping New Equipment Digest your best source of information on what's new.

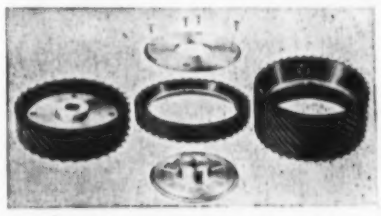
A. N. Gregg
EDITOR

PRINT MATERIAL CHART has reproduction processing data

How Kodagraph materials can be used to the best advantage in reproducing originals in both good and poor condition on existing print-making equipment is detailed on the Materials Selection Chart. It gives solutions to drawing reproduction problems, lists common types of originals and indicates and describes Kodagraph materials to be used for each type. Processing information is given. Available free from **Eastman Kodak Co.**, Dept. E, 343 State St., Rochester 4, N. Y.

▲ For more details circle **NED-5005** on enclosed inquiry slip ▲

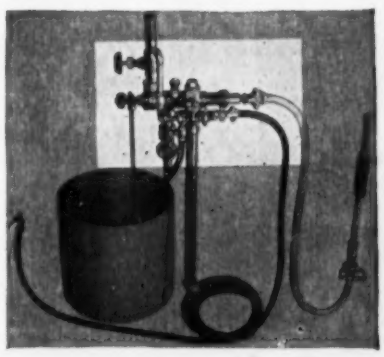
ABRASIVE BELT CONTACT WHEEL serrated tire can be replaced



When worn out, the serrated rubber tire on this T-61 Universal Hub abrasive belt contact wheel can be replaced at half the cost of standard contact wheel replacement. Wheel is a three-part bolted metal assembly which consists of flanged hub, serrated tire and side plate, and is a refinement of the earlier 61 model (*June '51, NED*). Up to 144 different tires from ¼ to 6 in. in width and from 5 to 105 durometer hardness can be mounted on a single hub and plate. Rough belt grinds to finest finishes on flat or contoured parts can thus be performed using same basic hub without removing it from spindle. Hub wheel, plate and tire are separately balanced to afford this interchangeability. Made by **Carborundum Co.**, Dept. NED, P. O. Box 337, Niagara Falls, N. Y.

▲ For more details circle **NED-5006** on enclosed inquiry slip ▲

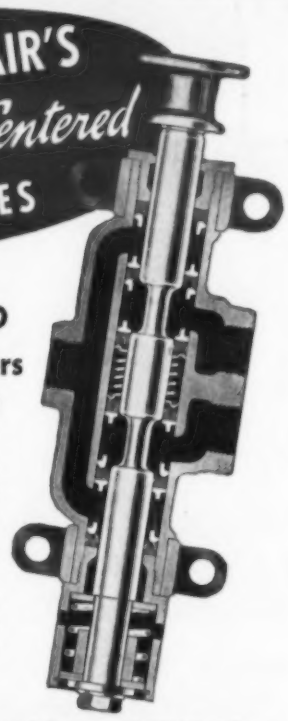
CHEMICAL CLEANING UNIT jet throws hot chemical stream



Hard-to-remove foreign matter can be cleaned from various surfaces by the Chemo Jet cleaning unit which throws a solid stream of hot chemical and provides a separate high impact jet of water. In chemical step, 150 gph jet of hot undiluted detergent or solvent can be directed on surfaces over 20 ft away. Through another hose and nozzle, the same unit shoots a jet of hot, high pressure water up to 35 ft. Volume is up to 1000 gph. All heating and propelling is done within the unit by ordinary plant steam. Only installation required is connection to plant steam and cold water. Cleaners are offered for wall mounting or as portable units with 50-gal detergent tank. Made by **Sellers Injector Corp.**, 1664 Hamilton St., Philadelphia 30, Pa.

▲ For more details circle **NED-5007** on enclosed inquiry slip ▲

Introducing VALVAIR'S NEW Spring-Centered NEUTRAL VALVES



STOP FAST . . . HOLD
Double-acting Air Cylinders
in ANY POSITION!

Valvair's new spring centered neutral valve is for air, hydraulic or vacuum service; for pressures up to 300 p. s. i. Sizes: ¼" through 1". Control assembly can be knob, lever, treadle, cylinder or solenoid.

Write for Bulletin KN-6.

VALVAIR CORPORATION • 947 Beardsley Ave., Akron 11, Ohio
Affiliate: Sinclair-Collins Valve Company

Rely Upon Valvair — 2-WAY — 3-WAY — 4-WAY

▲ For more details circle NED-5008 on enclosed inquiry slip ▲

How To
Mark Name Plates In
1/5 the Time

Cutting costs in these times is a good trick if you can do it. You can, on plates requiring detail marking, by using an Automark Electric Metal-Marking Typewriter. The operator lightly touches the key and the Automark does the rest, quickly and automatically. No dial to turn—no lever to pull. Marking output is increased five times and worker fatigue is greatly reduced. Write today for Bulletin 8-16.

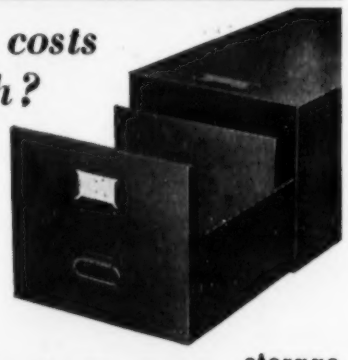
AUTOMARK
Electric Metal-Marking
TYPEWRITER
Manufactured Exclusively By

AGENTS
Desirable territories open for responsible representatives. Write giving complete information, lines carried and territory covered.

DEFIANCE MACHINE & TOOL COMPANY
1928 South Vandeventer Ave. • St. Louis 10, Mo.

▲ For more details circle NED-5009 on enclosed inquiry slip ▲

Space costs high?



Reduce them 50%
with
Diebold's *Safe-T-Stak* storage files!

Why pay for dead storage space when Safe-T-Stak, the unique re-enforced steel file, can reduce costs up to 50%! Let us show you how. Clip the coupon today for a survey of your present area.

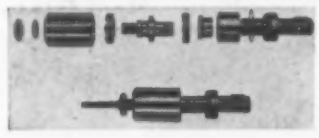
Diebold INCORPORATED
record handling systems
2041 Mulberry Rd., S.E.,
Canton 2, Ohio

I want complete details on Safe-T-Stak and a survey of my storage area without obligation.

NAME _____ TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

▲ For more details circle NED-5010 on enclosed inquiry slip ▲

FLOATING TAP HOLDER
for multiple spindle machines



Designed for use in multiple spindle machines, JT floating tap holder has double spline drive coupling for neutralizing or intermediate driving member. Clearance between mating splines allows free movement. Two thrust bearings minimize effect of force applied on tool by the hole and allow taps to float freely into alignment. Small body diameter, short projection, Quick-Lock nut and O-ring seals are among features. Made by **Scully-Jones & Co.,** 1952 S. Rockwell St., Chicago 8, Ill.

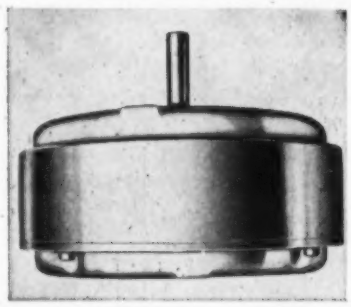
▲ For more details circle NED-5011 on enclosed inquiry slip ▲

PIPE NIPPLE DISPENSER
facilitates stocking and handling

Two-Faced Toter for pipe nipples is 20-gage cold-rolled steel box which can be turned over to expose two compartments. Each side holds a selection of various sizes from close through 6 in. Unit protects threads, facilitates selection, prevents loss and keeps stock handy. Construction features piano hinges, trunk type latches and heavy carrying handle. The ½-in. size sells for $9.45 and the ¾-in. size sells for $9.95. Made by **Thon Plumbing & Heating Co.,** 115A E. Broadway, Owatonna, Minn.

▲ For more details circle NED-5012 on enclosed inquiry slip ▲

WAFER MOTOR
flat design adapts it for many uses



Exceptionally short overall length of this Wafer motor adapts it to applications requiring a totally-enclosed air-cooled unit of flat design. It is available in ratings from 1/20 through 5 hp and in speeds from 450 to 3600 rpm either single or polyphase. It is particularly applicable for air moving or ventilating equipment where motor is to be mounted within piping or vent. Frame design permits mounting by "ears," drilled and tapped holes in endbells or with brackets. It operates in any position. Speed and horsepower are claimed to be greater than corresponding sizes of conventional motors. Made by **Reuland Electric Co.,** Mission & Fremont, Alhambra, Calif.

▲ For more details circle NED-5013 on enclosed inquiry slip ▲

Slash
SHEET METAL ASSEMBLY TIME

New type clamp produces better sheet alignment—*without pliers.*
- Simple push-pull action.
- Faster, easier to insert and remove.
- Clamping pressure adjustable to 300 psi.
- Fits in areas too small for regular clamps.
- Rivet-type action. No hole stop for plate misalignment.
- Largest, safest, locking area of any clamp.

WRITE TODAY

Air Associates INC
SERVING THE NATION IN AVIATION
TETERBORO, NEW JERSEY

▲ For more details circle NED-5014 on enclosed inquiry slip ▲

The *ONLY* wire stitching machine with an
ELECTRICALLY ACTUATED POST
to eliminate operator fatigue

THE YOUNG CONQUEROR
- Operated by light pressure of the toe with both feet firmly on the floor.
- Sealed in Ball Bearings.
- Automatic Brake.
- Power Control Unit (150 to 350 stitches per minute)
- Simple Head Construction.

Add all of these and you have a
YOUNG CONQUEROR

Some territory still open for distributors.

DIAGRAPH-BRADLEY INDUSTRIES, INC.
Young Wire Stitcher Division
Herrin, Illinois
Philadelphia, Pa.—New York, N. Y.—Chicago, Ill.

▲ For more details circle NED-5015 on enclosed inquiry slip ▲

BROWNING
First Again!
WITH "UNBREAKABLE" MALLEABLE IRON SPLIT TAPER BUSHINGS

in BROWNING GRIPBELT SHEAVES
FLEXIBLE AND RIGID COUPLINGS and BROWNING PAPER PULLEYS

Write for the name of the BROWNING distributor near you
BROWNING MANUFACTURING COMPANY
MAYSVILLE, KENTUCKY, U. S. A.

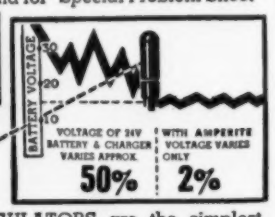
▲ For more details circle NED-5016 on enclosed inquiry slip ▲

AMPERITE

THERMOSTATIC METAL TYPE
Delay Relays
PROVIDE DELAYS RANGING FROM 1 TO 120 SECONDS

FEATURES: — Compensated for ambient temperature changes from —40° to 110° F . . . Hermetically sealed; not affected by altitude, moisture or other climate changes . . . Explosion-proof . . . Octal radio base . . . Compact, light, rugged, inexpensive . . . Circuits available: SPST Normally Open; SPST Normally Closed.
PROBLEM? Send for *"Special Problem Sheet"*

Regulators



Amperite REGULATORS are the simplest, lightest, cheapest, and most compact method of obtaining current or voltage regulation . . . For currents of .060 to 6 Amps. . . . Hermetically sealed; not affected by altitude, ambient temperature, humidity.
Write for 4-page Illustrated Bulletin.

AMPERITE CO., Inc., 561 Broadway, New York 12, N. Y.
In Canada: Atlas Radio Corp., Ltd., 560 King St., W. Toronto

▲ For more details circle NED-5017 on enclosed inquiry slip ▲

INDUSTRIAL THERMOMETER NO. A12403½

SELF-OPERATING REGULATOR SERIES 90000

DIAL THERMOMETER NO. V80200

STEAM TRAP NO. 2-¾"

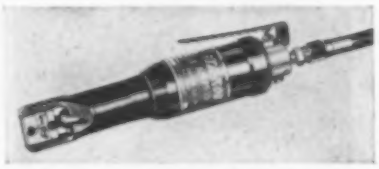
Need Help? Try TRERICE!

● You can save money, get extra efficiency when you install Trerice temperature instruments. You'll find a spot for an easy-to-read industrial or dial thermometer on water and refrigeration lines, on hot water tanks, and on air ducts. You can place a quick-acting temperature regulator on a hot water storage heater, on an instantaneous heater, or on an oil preheater. And, for low maintenance costs, you can install a rugged Trerice trap on steam lines. It all adds up to top efficiency in any heating or refrigerating system. Write for a catalog, or information on any item shown.

H. O. TRERICE CO.
Since 1923
Manufacturers of
TEMPERATURE INSTRUMENTS
1424 W. LAFAYETTE BLVD.
DETROIT 16, MICHIGAN
Branches in principal cities

▲ For more details circle NED-5018 on enclosed inquiry slip ▲

TERMINAL STAKING TOOL
operates on shop compressed air



Power of hydraulic tool is housed in compact, light body of hand tool in this unit for staking pressure wire terminals. It operates on shop air pressures of 75 to 150 psi and exerts 2-ton pressure on installing dies. Tool can be bench mounted or hand held and can be controlled by finger trigger or foot valve. Interchangeable dies are used to install bare or self-insulated Sta-Kon terminals on No. 10 through 22 AN or AWG wires. Made by **Thomas & Betts Co.**, 24 Butler St., Elizabeth 1, N. J.

▲ For more details circle NED-5021 on enclosed inquiry slip ▲

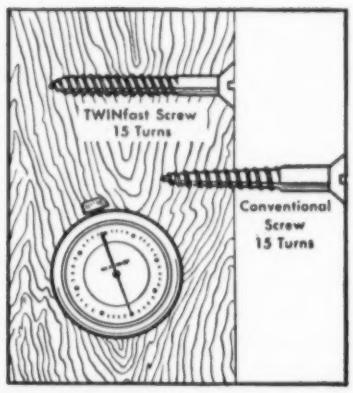
VACUUM FILTER BAG
fits suction type cleaners

Made of Supertex fabric, heavy duty vacuum cleaner filter bag will not clog and is unaffected by acids and destructive chemicals in oil, coal soot and other dusts. Dirt and dust forms a sort of fragile film on inside of bag. This film breaks down and falls to the bottom of the bag, leaving the pores of material unobstructed and the fabric undamaged. Made by **National Super Service Co.**, 1949 N. Twelfth St., Toledo 2, O.

▲ For more details circle NED-5022 on enclosed inquiry slip ▲

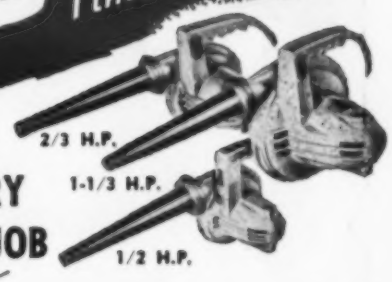
WOOD SCREW
has two threads for fast driving

Two threads with twice the normal pitch permit the Twinfast wood screws to drive twice as fast as conventional screws, yet hold tighter. Costing the same as other screws, this fastener has parallel sides which give more thread area in contact with the material for greater holding power. Shank or unthreaded portion is the same diameter as the thread pitch. The two threads come together in a sharp, single point. Screws are made of steel or brass in all standard sizes with flat, round and oval head styles, either slotted or Phillips cross-recessed. Made by **Townsend Co.**, Dept. 123, New Brighton, Pa.

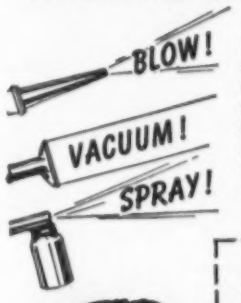


▲ For more details circle NED-5023 on enclosed inquiry slip ▲

IDEAL "Hand Type" CLEANERS — Cut Cleaning Time and Costs!



3 MODELS ...for EVERY CLEANING JOB



For easier, faster maintenance or production cleaning jobs — on machinery, stock bins, scrap pick up — there's an IDEAL "Hand-Type" Cleaner to meet your needs exactly — to save you money! Three great models, all built to rugged, real industrial standards. Get today's top cleaner value — get IDEAL!

Sold Through Leading Distributors

TRY ONE FREE!

IDEAL INDUSTRIES, Inc.
1032 Park Avenue, Sycamore, Illinois
Please give us FREE DEMONSTRATION of the IDEAL "Hand-Type" Cleaner for our plant.
NAME_____
COMPANY_____
ADDRESS_____
CITY_____ ZONE____ STATE____

▲ For more details circle NED-5025 on enclosed inquiry slip ▲

LEARN the FACTS DISCOVER WHY PITCHLIGN

Trade Mark

ROLLER BEARINGS OUTLAST, OUTPERFORM, ALL OTHERS

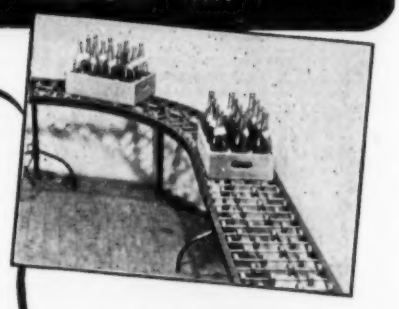
Races and rollers made from through hardened SAE-52100 steel for longer life. One-piece, tubular continuous steel cage aligns the rollers at their PITCH LINE so they cannot skew. Another important factor in better performance! Get the complete story. Write for Bulletin SF. 966

WRITE TODAY!

RBC
ROLLER BEARING COMPANY OF AMERICA
TRENTON, N. J.

▲ For more details circle NED-5019 on enclosed inquiry slip ▲

GRAVITY COSTS YOU NOTHING
Handle Cartons · Boxes · Cases...
THE SAGE WAY



Illustrated: Model 14SE10, ten ball bearing wheels per foot, 14" overall width. Handles 90% of all standard cartons, boxes, cases. Available in 5' and 10' lengths, 45 and 90 degree curves. Adjustable stands in three sizes. Special models to order.

District Engineers in Principal Cities

CHECK THESE FEATURES
- Light, strong welded construction for easy, one-man handling.
- Assembles by hooking together; no tools needed.
- Adjustable stands of all-welded steel construction permit control of slope from 14" to 76".
- SAGE equipment helps you put gravity to work.

Write for prices and information.

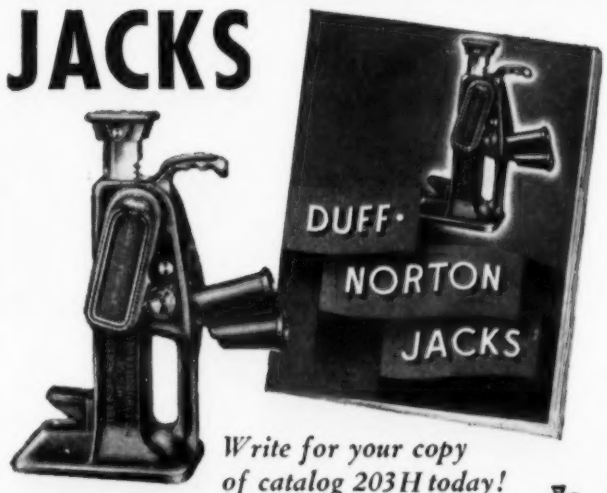
SAGE also manufactures a complete line of roller, power belt and slat and chain conveyors. Try expert engineering by Sage.

SAGE EQUIPMENT CO.
28 ESSEX ST. BUFFALO 13, N. Y.

▲ For more details circle NED-5020 on enclosed inquiry slip ▲

For all heavy lifting • lowering • pushing • pulling

DUFF-NORTON JACKS



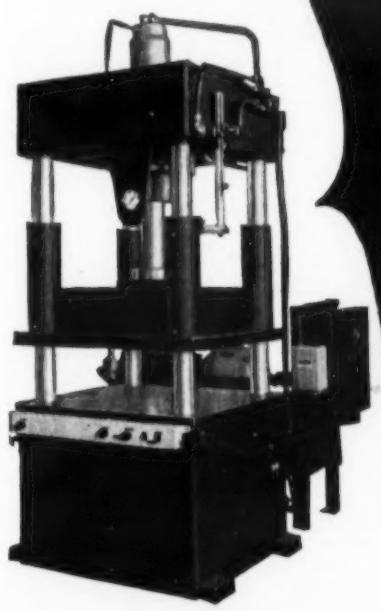
Write for your copy of catalog 203H today!

5 TON RATCHET LOWERING JACKS

You need this 40-page Duff-Norton Jack catalog—to choose the *right* jack for every job. Jacks save time, money, effort. Write today!

THE DUFF-NORTON MANUFACTURING CO.
Main Plant and General Offices: PITTSBURGH 30, Pa.—Canadian Plant: TORONTO 6, ONT
"The House that Jacks Built"

▲ For more details circle NED-5024 on enclosed inquiry slip ▲



DAKE GUIDED PLATEN PRESS for accurate, positive pressure

Here is a press specially engineered to the requirements of an aircraft engine builder. It is a 75-ton, 4-post, double-acting platen press, powered hydraulically and equipped with J. I. C. electric controls.

This press will be used for testing and inspecting aircraft engine cranks. It is equipped with a special timing device arranged so that the ram advances quickly almost to contact, then advances under full power until a pressure of exactly 52 tons is exerted on the work. After this pressure has been held two minutes, the pressure is released automatically and the ram returns to starting position.

Dake Guided Platen Presses, like other Dake Presses, can be engineered to your particular requirements. They are available in capacities up to 300 tons. We will gladly work with you in developing whatever special press equipment you need.

DAKE PRESSES

DAKE ENGINE COMPANY
642 Seventh St.
Grand Haven, Mich.

Arbor Presses | Hand-Operated Hydraulic | Power-Operated Hydraulic | Guided Platen | Gap Type Presses | Movable Frame

▲ For more details circle NED-5026 on enclosed inquiry slip ▲

Look to Morton FOR FIXTURE CLAMPS AND FIXTURE DETAILS

WRITE TODAY

AND BE ASSURED OF QUALITY, SERVICE AND FINE WORKMANSHIP

Widest range of types and sizes in the industry . . . Complete Clamp Assemblies or any of their Component Parts . . . Economize by using them as Standards.

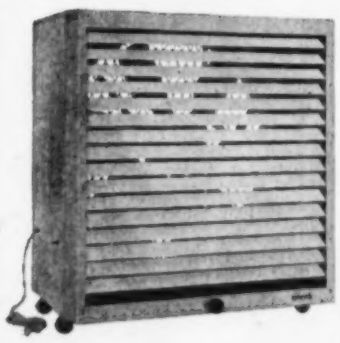
For Catalog of our complete line. Includes full size tracing templates of each product. Save tooling and designing costs.

MORTON MACHINE WORKS
2421 WOLCOTT STREET • DETROIT 20, MICHIGAN

For more details circle NED-5027 on enclosed inquiry slip

powerful cooling when and where you want it!

Reed PORT-O-VENT AIR CIRCULATOR



The *tested* and *proven* answer to on-the-spot man-cooling problems! Thousands in use in plants, factories, offices everywhere. Reed Port-O-Vents are highly mobile, move *plenty* of air. All-steel construction, mounted on casters, heavy wire guards both sides, overload protected *reversible* motor. Extremely quiet and economical operation. Write today for full information.

Certified Air Delivery Ratings
Fans Less Guards

24 Inch	4,500 CFM
30 Inch	7,250 CFM
36 Inch	10,050 CFM
42 Inch	12,000 CFM

FOR COMPLETE, DETAILED INFORMATION WRITE:
Reed UNIT-FANS, INC.
1001 St. Charles Ave., New Orleans, U. S. A.

For more details circle NED-5028 on enclosed inquiry slip

Got a Heating Problem?

HERE'S A QUICK, LOW-COST SOLUTION } CHROMALOX Electric HEAT

Economical CHROMALOX Electric Heaters can be installed anywhere to provide efficient "on the spot" heat at accurately maintained temperatures in all types of applications. They may be used to heat gases and liquids; to heat dies, molds and platens, to melt soft metals and for hundreds of other uses. 15,000 types, sizes and ratings are available for almost any need! Nationwide engineering assistance is yours without obligation.

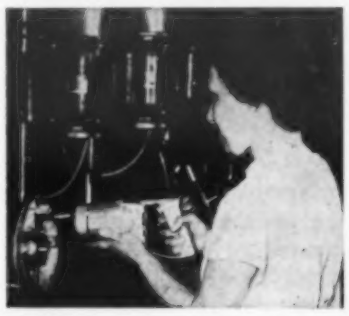
Get Your Copy of CHROMALOX CATALOG 50

It shows many of the standard 15,000 types, sizes, ratings of Chromalox Electric Heaters. Write today:

EDWIN L. WIEGAND CO., 7509 THOMAS BOULEVARD, PITTSBURGH 8, PA.
See other advertisements pages 14 and 83.
CHROMALOX
ELECTRIC HEAT FOR MODERN INDUSTRY
18-94

For more details circle NED-5029 on enclosed inquiry slip

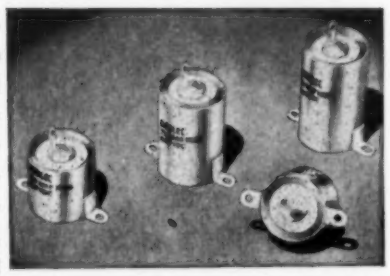
ELECTRIC DRILLS
have choice of seven speeds



Production lines are possible applications for line of ¼-in. capacity portable electric drills with free drilling speeds of 600, 800, 1000, 1750, 2500, 3500 or 5000 rpm. Pistol grip, spade handle and center contour handle designs are available. Weight is from 3½ to 4 lb. Balanced armatures and matched gears reduce vibrations. All three models have universal type ac-dc motors for 115 or 230-v, 25 to 60-cycle current. Made by **Mall Tool Co.**, 7725 S. Chicago Ave., Chicago 19, Ill.

For more details circle NED-5030 on enclosed inquiry slip

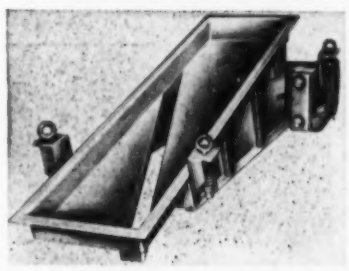
CAPACITORS
ceramic units hermetically sealed



Combination of high "Q", capacitance stability and good retrace characteristics are incorporated in metal-encased tubular ceramic capacitors. Type B20, B21, B22 and B23 units have ratings of 500, 1000 and 1500 v dc. Controlled capacitance tolerance is within plus or minus 1 per cent and temperature coefficient tolerances are within plus or minus 10 parts per million per degree Centigrade. Made by **Sprague Electric Co.**, 183 Marshall St., North Adams, Mass.

For more details circle NED-5031 on enclosed inquiry slip

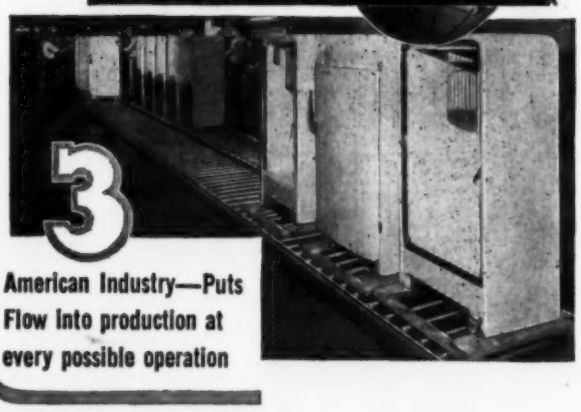
VIBRATING SPREADER-FEEDER
has diagonal discharge slot



A continuous curtain of bulk materials such as roofing granules or calcium chloride is provided by vibrating spreader feeder which is powered by single electromagnet drive. Feeder's vibratory action flows material out along flat pan trough, discharging it along edge of diagonal slot to form even curtain of material two to four times width of original material stream. Drive is mounted above or below trough depending upon room available. Rate of feed is controlled by knob on separate control box. Feeder is available in several sizes and capacities. Made by **Syntron Co.**, 405 Lexington Ave., Homer City, Pa.

For more details circle NED-5032 on enclosed inquiry slip

HOW AMERICA OUT-PRODUCES The WORLD



3 American Industry—Puts Flow into production at every possible operation

One of the principal factors in keeping things on-the-move is correctly engineered conveyors. Logan equipment delivers material and parts at convenient working heights, dispatches the product without manual effort to the next operation, puts-flow-into-production in countless American plants. Remember too, you get that "something extra" in engineering and design when you specify Logan Conveyors. Write for nearest field engineer to call.

Logan Conveyors
LOGAN CO., 215 CABEL ST., LOUISVILLE, KY.

For more details circle NED-5033 on enclosed inquiry slip

Does your company maintain shower rooms ?

If so, you should ask yourself this question:

"Why do over 70% of the largest manufacturers in the U.S.A. use ŌNOX in *their* shower rooms?"

ANSWER: ŌNOX SKIN-TOUGHENING has proved to be the easiest and most effective way to prevent Athlete's Foot.

Skin specialists say that the best chance of preventing Athlete's Foot is to *stop* trying to disinfect the feet and concentrate instead on improving the condition of the skin.

A sound skin is nature's best protection against fungus attack.

That is the basic principle of ŌNOX SKIN-TOUGHENING and is the reason it is so widely used today. *Easy to maintain • Nothing to get out of order.*

Write for further information and details of
60-DAY TRIAL OFFER

ŌNOX, INC. 125 SECOND ST., SAN FRANCISCO 5, CALIF.
WAREHOUSES: BROOKLYN • CLEVELAND • NEW ORLEANS • LOS ANGELES

For more details circle NED-5034 on enclosed inquiry slip

POR-ROK (POUR ROCK) Fast Setting Cement

PERMANENTLY ANCHORS BOLTS IN CONCRETE WITHIN 30 MINUTES!

Securely fastening machinery, hand rails, seats, fixtures or any type of equipment to concrete by means of anchor bolts can now be done quickly, easily and safely with Por-Rok Quick Setting Cement.

Por-Rok successfully replaces lead and sulphur, and costs considerably less. Applied cold, there is no heating hazard. Simply mix Por-Rok powder with water and pour around bolt. Within 30 minutes the cement sets hard and the bolt is anchored permanently.

Por-Rok also makes quick, lasting repairs to holes and breaks in concrete floors with little or no interruption to normal traffic. It is self-bonding, self-leveling, oil-resistant, does not shrink. Compression strength of 4500 lbs. p.s.i. in one hour GUARANTEED.

For complete information—without obligation—write

THE HALLEMITE MFG. CO.
2452 WEST 25th ST. • CLEVELAND 13, OHIO SINCE 1927

For more details circle NED-5035 on enclosed inquiry slip

PHOTO EQUIPMENT... Geared to SCIENTIFIC and INDUSTRIAL Uses

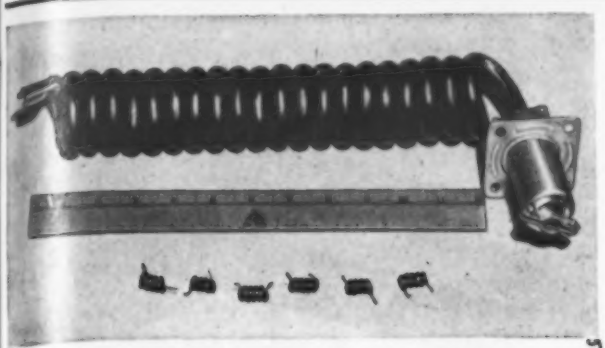
FREE CAMERA, LENS and EQUIPMENT CATALOG

NEW—72 pages crammed with THOUSANDS of newest PHOTO TOOLS, CAMERAS, LENSES, PROJECTORS, Lighting Equipment, Developing Equipment, ENLARGERS, etc. for the amateur and professional, in every day SCIENTIFIC and INDUSTRIAL work.

CAMERAS	Commercial — Recording — Identification — Special Purpose — Polaroid Land Back — Laboratory — Photomicrography — etc.
ENLARGERS	Reducers — Copying, etc.
LENSES	Largest stock from ⅜" to 72" — all speeds — Portrait — Commercial — Wide Angle — Tele-Lens — Coating, etc.
PRINTING EQUIP.	35 Mm. to 8x10 in. etc.
PROJECTORS	Demonstration and Instruction.
LABORATORY EQUIP.	Stainless Steel, Slide Equip., Dryers, etc.

Burke & James, Inc.
311 S. Wabash Ave., Chicago 4, Ill. U.S.A.
Fine Photographic Equipment For Over 54 Years

For more details circle NED-5036 on enclosed inquiry slip



THE LARGEST AND SMALLEST KOILED KORDS*

HOW WOULD YOU USE THEM?

The largest Koiled Kord made is for use with trailers and has an over-all diameter of 2½". The smallest is only ⅝" long, with an over-all diameter of ¼". It has a single conductor and was made for use in a car heater switch. Between the smallest and the largest, we make innumerable sizes of Koiled Kords for innumerable uses in communications, home and industry. Koiled Kords extend to approximately five times their length and always retract to their original shape and size. *trade mark

HOW WOULD **YOU** USE KOILED KORDS?

Write on your business stationery for a sample of Koiled Kords.

Koiled Kords INCORPORATED

BOX "K"
HAMDEN, CONN.

IN CANADA: R. D. FLECK & CO., LTD., OSHAWA, ONTARIO

▲ For more details circle **NED-5037** on enclosed inquiry slip ▲

Read This . . .
and reduce fire hazards in your plant

SEND TODAY for this booklet . . . learn how Flamefoil canvas can give an extra margin of safety against fire in your plant.

FLAMEFOIL GUARDSMEN

PHILADELPHIA TEXTILE FINISHERS, Incorporated
108 LAFAYETTE STREET
NORRISTOWN, PA.

▲ For more details circle **NED-5038** on enclosed inquiry slip ▲

LOAD CAPACITY 750 Pounds
LIFTING HEIGHT 52 Inches

LIFT and MOVE Your DRUMS CRATES DIES JIGS and OTHER LOADS with TIME SAVING SPEED and SAFETY

Let BIG JOE'S smooth working, powerful HYDRAULIC LIFT keep your production, shipping and receiving . . . *"ON THE MOVE"*

Adjustable-Fork Lift (as illustrated) $256.50 F.O.B. Chicago

(Platform Lift $236.50 F.O.B. Chicago)

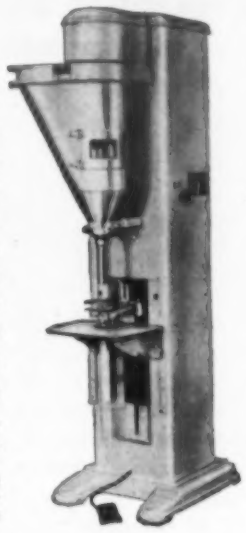
With Big Joe's trim design you avoid moving useless dead weight around. Foot pedal operation is *far simpler and easier*. All moving parts are ball or roller bearing equipped. Positive acting wheel brakes afford maximum safety. Solid rubber tires (no hollow core). Steel or rubber front casters optional. Big Joe models with platform lift also available. Ask for literature showing all models . . . A demonstration can be arranged in your own plant.

PROMPT DELIVERY

BIG JOE MFG. CO. 184 N. Franklin St. Chicago 6, Illinois

▲ For more details circle **NED-5039** on enclosed inquiry slip ▲

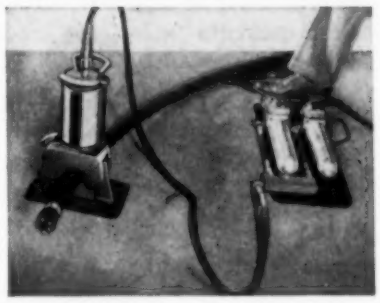
FILLING MACHINE fills by pack, weight or volume



With mechanical parts located above the filling station on the EG Universal filler, they are kept free of dust and dirt, thereby reducing cleaning maintenance. Machine is adaptable for rotary and in-line conveyor filler. Table is adjustable for filling by pack, weight or volume. Auger speed is adjustable from 500 to 1000 rpm. Micrometer adjustment sets machine for fine and coarse products. Made by **Stokes & Smith Co.**, Dept. D, Frankford, Philadelphia 24, Pa.

▲ For more details circle **NED-5040** on enclosed inquiry slip ▲

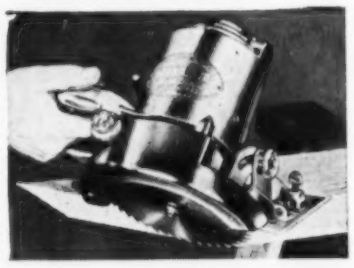
WIRE ROPE CUTTER makes clean cuts up to 1¾ in.



By exerting thrust up to 50 tons, series 15 latch-type Guillotine cutter can make a clean cut through wire rope measuring up to 1¾ in. Cutting time is as short as 7 seconds, depending upon pump assembly used. Shear type blades are removable for resharpening. The 75-lb unit is offered with variety of electric and air-hydraulic pump assemblies, including foot lever and remote control types. Made by **Manco Mfg. Co.**, Washington St., Bradley, Ill.

▲ For more details circle **NED-5041** on enclosed inquiry slip ▲

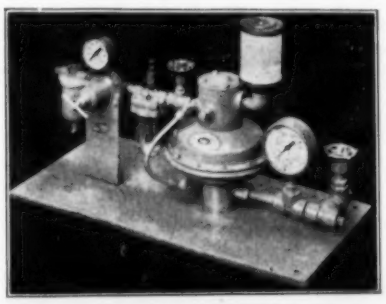
PORTABLE ELECTRIC SAW bevel cuts 2-in. dressed lumber



Weighing only 10 lb, the Maxaw 700 portable electric saw features the Magic Pivot which puts pivot point of the saw shaft close to saw shoe and work. Result is light weight and minimum bulk of saw. It will cut 2-in. dressed lumber in a 45-degree bevel cut. Saw makes use of stub-radius blades which put maximum power at the cutting edge and retain cutting capacity after repeated sharpenings. Saw sells for $69.50. Announced by **Cummins-Chicago Corp.**, Cummins Industrials Div., 4740 N. Ravenswood Ave., Chicago 40, Ill.

▲ For more details circle **NED-5042** on enclosed inquiry slip ▲

NEW HYDRAULIC POWER PACKAGE Offers Pressures to 30,000 psi



Model S-440 Air Operated Hydraulic Power Package is designed for oil or water service and is capable of output fluid pressures to 30,000 psi from 100 psi plant supplied air pressure. Operates on the principle of Differential Areas. Broadly applicable for a wide variety of uses where low volume output at high pressure is the requirement such as in hydrostatic testing.

Simple to install. Requires only two connections, one to plant air supply line and the other to manifold, etc., from outlet fluid port of power unit for immediate operation. Contains all necessary equipment, including air operated pump, air muffler, air filter, air lubricator, air regulator, valves and gauges, all mounted on an easy-to-carry masonite base. Measures 12" x 12" x 24"; weighs 45 lbs.

Heart of the power package is the Sprague Model 216-C pump. Available separately, it is furnished in six standard models with ratios of 35:1, 60:1, 100:1, 150:1, 200:1, and 300:1, making possible outputs of 3,500 to 30,000 psi.

Sprague Engineering & Sales Corp., 1144 West 135th St., Gardena, California. *Advt.*

▲ For more details circle **NED-5043** on enclosed inquiry slip ▲

Half a cupful . . . *can sink a boat*

Power boat skippers don't frighten easily.

Yet they're scared stiff of gasoline seepage. "It's dynamite," they tell you, "—half a cupful can blow your boat to 'Kingdom Come'."

So they put boat builders right on the spot when it comes to gas tanks.

They want tanks made of metal that sea air, bilge, or gasoline won't corrode . . . metal that's easy to fabricate, to weld gas-tight . . . metal that doesn't form sludge that "gums up" fuel lines and leaves you going nowheres, slow.

Now that's a mighty tall order.

But boat builders filled it. Filled it with a metal that satisfies *their* demands . . . and the strict requirements of the Yacht Safety Bureau. Filled it with a metal that qualifies in every respect for gas tanks, among stock boat builders.

The one metal that meets, and more than meets *all* these requirements, is *Monel*, an Inco Nickel Alloy.

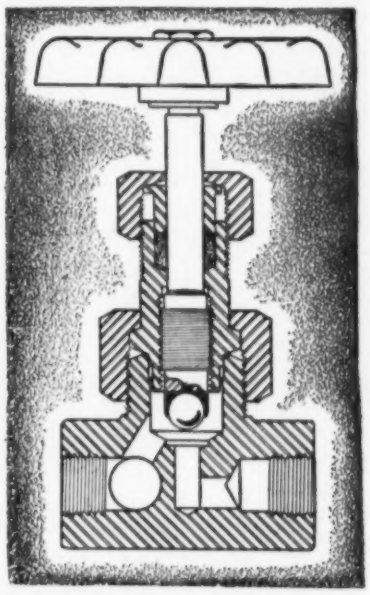
A Cue for You? Write for "Standard Alloys for Special Problems"—Summarizes the important facts and data on 12 INCO Nickel Alloys in one booklet. Gives a quick comparative guide to judge for yourself which alloy may be a ready answer to your problem, too.

It's yours for the asking.

THE INTERNATIONAL NICKEL COMPANY, INC.
75 Wall Street, New York 5, N. Y.

▲ For more details circle **NED-5045** on enclosed inquiry slip ▲

NEW! BALL VALVE
for air lines, meter manifolds, pressure gauges, other services



Here's a radically-new forged steel valve that can't leak . . . practically never wears out . . . costs less than ordinary steel valves.

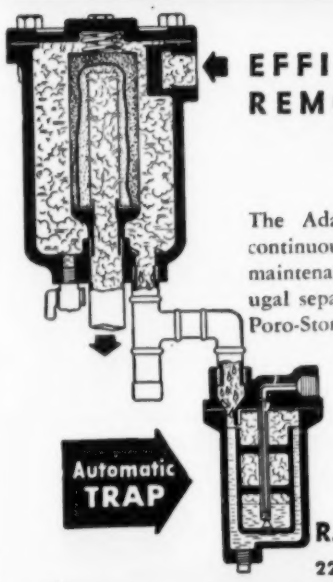
In place of a disc or plug, the new Foxboro Ball Valve has a retained, free-rolling stainless steel ball that exposes new surface to seat at every closing.

Foxboro Ball Valves handle pressures to 3000 psi. Available in straight-thru and angle types. Two or four connections to simplify piping. ¼" size. Write for detailed folder. **The Foxboro Company, 1346 Neponset Avenue, Foxboro, Mass., U.S.A.**

FOXBORO INSTRUMENTATION
REG. U.S. PAT. OFF.

▲ For more details circle **NED-5046** on enclosed inquiry slip ▲

Poro-Stone Filtration FOR COMPRESSED AIR



EFFICIENTLY REMOVES:
OIL, WATER PIPE SCALE

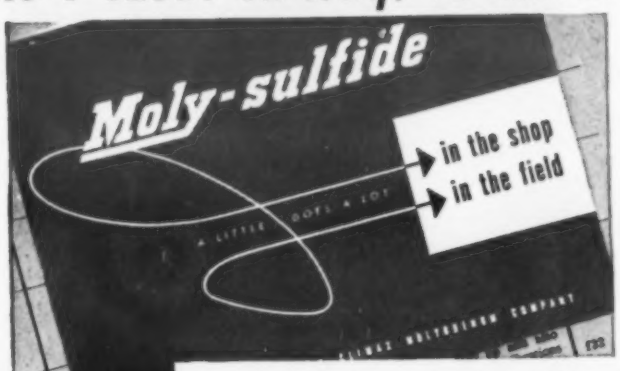
The Adams *Poro-Stone* Filter gives continuous service without attention or maintenance expense. Efficient centrifugal separation *plus* diffusion through Poro-Stone, removes contamination completely without pressure loss. Automatic Trap eliminates attention and assures continuous and efficient filter operation. Write for complete data—Bulletin 176.

R. P. ADAMS CO., INC.
227 E. Park Dr., Buffalo 17, N. Y.

ADAMS *Poro-Stone* AIR FILTER

▲ For more details circle **NED-5047** on enclosed inquiry slip ▲

154 ideas on ways to use...



154 varied applications of molybdenum sulfide in the shop and in the field are described in a new booklet now available. This solid-film lubricant has demonstrated unique anti-friction properties under conditions of extreme pressure, high velocity, elevated temperature, or chemical attack.

The 40-page booklet contains the records of solved lubrication problems—some might solve your own.

Moly-sulfide
A LITTLE DOES A LOT
The lubricant for extreme conditions

MS-6

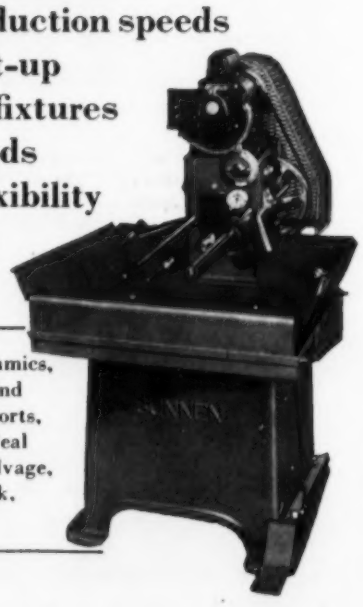
Climax Molybdenum Company
500 Fifth Avenue, New York City 36, N.Y.

For more details circle NED-5048 on enclosed inquiry slip

From simple deburring to exact sizing and finishing,

New Model Sunnen Honing Machine Cuts Production Costs

- Higher production speeds
- Instant set-up
- No jigs or fixtures
- Heavier loads
- Greater flexibility
- Longer life



Hones metals, ceramics, glass; open and blind holes; holes with ports, lands, keyways. Ideal for Production, Salvage, Tool and Die Work, Maintenance.

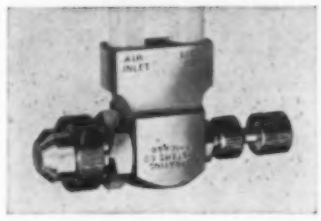
Metal working manufacturers using Sunnen Honing have found that their products run faster and quieter, perform better, and last longer when bearings and cylinders are Sunnen Honed. That's because they get the right surface finish and the exact dimensional tolerance required.

And now Sunnen Honing is easier and faster than ever. Recent improvements speed up loading and unloading . . . provide smooth, vibrationless operation . . . increase operator efficiency. Diameter range, .120" to 2.625"; dimensional accuracy guaranteed to .0001"; surface finish to 2 micro-inches RMS in hardened steel. Average installation costs less than $1,000. Investigate now—Sunnen Honing may be your answer, too! Write for details of the new Model MBB Honing Machine.

SUNNEN PRODUCTS COMPANY
7931 Manchester Ave., St. Louis 17, Missouri
Canadian Factory: Chatham, Ontario

For more details circle NED-5049 on enclosed inquiry slip

ATOMIZING NOZZLES
with or without shutoff needle



Special mounting problems can be solved by pneumatic atomizing nozzle which has air and liquid inlets positioned at top of nozzle body at right angles to spray direction. Illustrated ⅛ JACN unit has shutoff needle. Same design, without needle, is identified as ⅛ JAC. Capacities and spray types are determined by fluid and air nozzle assemblies. Pressure or siphon setups with round, wide-angle round and flat sprays are available. Made by **Spraying Systems Co.**, 3211 Randolph St., Bellwood, Ill.

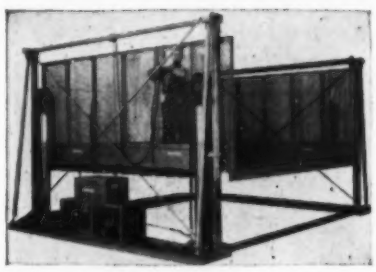
For more details circle NED-5050 on enclosed inquiry slip

LONG-TRAVEL DRILL UNIT
has skip-stroke attachment

Features of standard traversing motor shaft type Black drilling unit, plus 4-in. working travel and skip-stroke attachment are incorporated in this new drilling unit. It is suitable for accurate drilling in materials requiring frequent chip clearing and drilling in hard-to-get-at locations. Operation can be in any position. Air feed provides rapid shockless advance to work and hydraulic control gives uniform drill feed even when breaking through. Micrometer stop insures depth accuracy to 0.001-in. From one to six easily adjusted skip-stroke stops are provided. Unit is made in ¼ to 5 hp sizes by **Black Drill Co.**, 1380 E. 222nd St., Cleveland 17, O.

For more details circle NED-5051 on enclosed inquiry slip

FOUR-POST LIFTER
aids railway car and truck loading



Loading of trucks and railway cars as well as level-to-level movement of trucks and skids is facilitated by Electraulic four-post lifters. Electric - hydraulic powered, lifters feature such safety factors as deadman pushbutton controls, platform guards, nonskid steel platform, ram overtravel stops, hydraulic overload relief and post rings to lock platform if chain fails. Capacities from 2000 to 12,000 lb and platforms from 5 x 5 ft to 12 x 12 ft are available. Lift elevations range from 5 to 17 ft at speeds from 8 to 23 ft per minute. Made by **Service Caster & Truck Corp.**, 578 N. Brownswood Ave., Albion, Mich.

For more details circle NED-5052 on enclosed inquiry slip

THERE'S NOTHING LIKE THE SERVICE YOU GET WITH dura-tred Co. QUICK-FLOOR

- *Engineering Help Before-and-After Installation! Easy End to Cracks and Holes in Your Floor!*

- No guesswork when you specify QUICK-FLOOR to instant-patch or resurface a worn floor. Not by any means! For your Dura-Tred Engineer helps you every step of the way . . . studies your floor repair needs . . . tells you how much QUICK-FLOOR is required . . . and if need be, supervises simple QUICK-FLOOR application. No delay—no lost production. Five minutes to lay a square foot. QUICK-FLOOR—the heavy-load, durable traction for all types of industrial floors, inside or out—*at very lowest cost.*

Ask for Descriptive Literature

A Few Territories Open for Manufacturers Representatives

dura-tred Co.
356 North Central Park Boulevard • Chicago 24, Illinois

For more details circle NED-5053 on enclosed inquiry slip

NO OTHER Electric HAND SAW Does . . . So Much So Fast . . . So Well

LESTO

SAWS
- 2" Hard or Soft Wood
- Curves of All Types
- Insertions
- Plastics

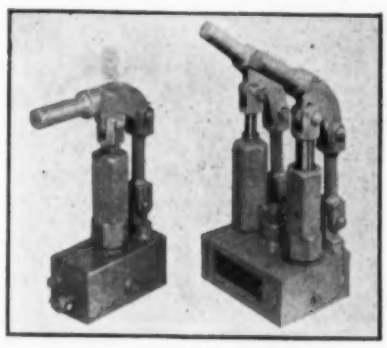
Designed, Manufactured and Patented by Scintilla, Ltd., Switzerland, since 1944.

Write for Literature
Sold & Serviced in Principal Cities Throughout U.S.A.
VICTOR J. KRIEG, Inc.
Sole U.S. Representative for Scintilla, Ltd. Switzerland
51 West 52nd St., New York 19, N. Y.
Eldorado 5-4030
Some Sales Territories Available

For more details circle NED-5054 on enclosed inquiry slip

HAND HYDRAULIC PUMP

Single and Double Designs To 20,000 Pounds

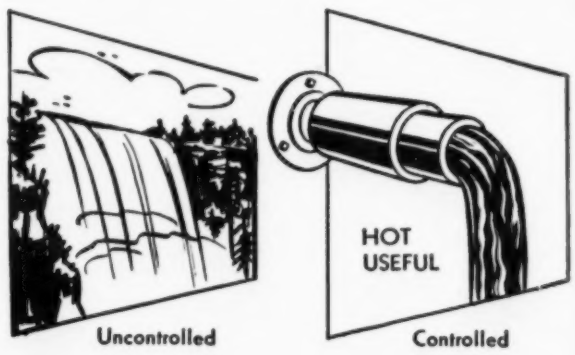


Interchangeable Pistons ⅜-½-¾ inch
★
Integral Release Valve
★
Unit Reservoir 360 cu. in.

Pressure range is 3,000 to 20,000 pounds. Pipe connections measure ¼ inch. Handle length is 18 inches. Weight is 8 to 18 pounds. Can be bolted or welded into position.

WILLIAM S. PINE
1635 E. 22nd St., Los Angeles 11, Calif.

For more details circle NED-5055 on enclosed inquiry slip



The beautiful but uncontrolled waterfall flows easily but so will your heavy viscous materials if you convey them through Parks-Cramer jacketed pipe and fittings heated with hot oil, steam, or hot water (depending on the product handled).

Jacketed Tee

Jacketed 3-Way Cock

Asphalt, amatol, lard, chocolate, molasses, sulphur, TNT, varnish, and wax, all these and many others can be made to flow like water.

Write NOW for Bulletin 152

Parks-Cramer Company
ENGINEERS and CONTRACTORS
Fitchburg, Massachusetts

For more details circle NED-5056 on enclosed inquiry slip

its No Secret!

Newcomb's 60 year record for satisfying spring purchasers speaks for itself! And proof of this outstanding record is the repeated use of Newcomb as a source for springs by many leading manufacturers of civilian and military products.

Yes—word has gone 'round that Newcomb produces quality springs better—faster—at lower costs!

Why not discover this fact for yourself? Just send us your blueprints, samples or ideas. We'll gladly offer suggestions and cost estimates. There is no obligation.

FREE BOOKLET — To help you design and specify for low cost springs, we'll send you our FREE booklet #NS 500 entitled, "66 Hints to Simplify Design and Reduce Spring Costs." Write for it today.

The NEWCOMB SPRING Corp.
3910 Seventh Ave.
Brooklyn 32, N. Y.

NEWCOMB SPRING of Conn., Inc.
220 Cherry Street
Bridgeport 5, Conn.

there's lots of "ZING" in a NEWCOMB SPRING!

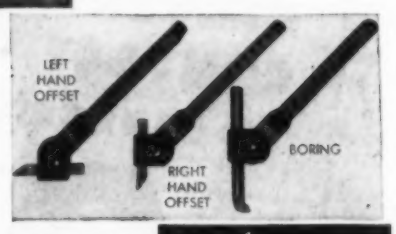
▲ For more details circle **NED-5057** on enclosed inquiry slip ▲

WALTON-AMERICAN *Tool Holders*

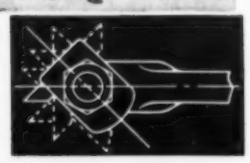
Hold with a perfect grip, tool bits, or boring bars in all sizes from 1/8" to 7/16", square or round. Besides gripping the tool securely top and bottom, it is held so that no lateral motion is possible.

VERSATILE MULTI-POSITION

The Walton-Americans are adjustable to bit size, and to any cutting position. All changes may be made at the machine without additional heads or set screws.



One Walton-American can be used in straight and right or left hand offset positions, or any other position around an entire circle (see illustration). Economy is doubly assured for very short bits may be used, and jaws will not break high speed steel or Stellite bits.



OTHER WALTON PRODUCTS—The well known *Walton Tap Extractor* for removing broken taps, and *Reps Pipe and Stud Extractor* for removing broken pipes, studs and screws (a product of Walton's affiliate, Reps Tool Company, Inc.).

Send for complete Catalog No. 26 of Walton Tools.

THE WALTON COMPANY

HARTFORD 10, CONNECTICUT

▲ For more details circle **NED-5058** on enclosed inquiry slip ▲

THE MATEER ELECTRIC FILLER HANDLES THEM ALL!

LIQUIDS · OILS · POWDERS · PASTES

COMBINED LIQUIDS AND SOLIDS

1/500 oz. to 2 Pounds
20 to 70 Per Minute
Up to 750° F

SAVE TIME AND MONEY WITH THE MATEER ALL ELECTRIC FILLING HEAD

Totally enclosed, manual or automatic. Accuracy as close as ±½%. Synchronize this self contained filling head with existing production lines and processing systems.

Jacketed and electrically heated hoppers available for handling cold and hot materials up to 750° F. Hot waxes, insulating compounds and asphalts handled without difficulty.

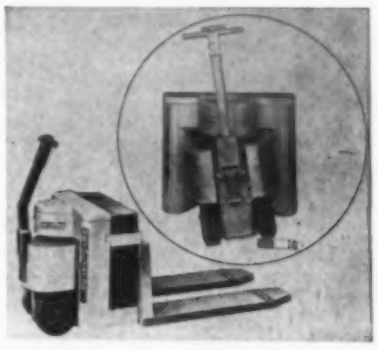
Send full information and samples of material to be tested. Write Dept. 105 for fully illustrated bulletin.

G. DIEHL MATEER & CO.

Lincoln Highway • Devon, Pa.

▲ For more details circle **NED-5059** on enclosed inquiry slip ▲

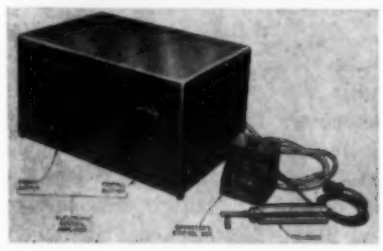
HAND FORK LIFT TRUCK has wheel articulation of 1⅝ in.



Feature of the Go-Getter hand fork lift truck is 1⅝-in. articulation of dual drive wheels for high degree of traction under such adverse conditions as uneven, worn or roughened floors. Truck can glide over door saddles and goes up and down ramps easily. Other advantages include fingertip controls, automatic deadman type braking which operates with handle in any position and dynamic braking to control heavy loads on steep ramps. Latter holds down-hill speed to approximately 2 mph. Made by **Revolvator Co.,** 2032 86th St., North Bergen, N. J.

▲ For more details circle **NED-5060** on enclosed inquiry slip ▲

PARTS DUPLICATING CONTROL attaches to machine tools to make duplicate parts from template



Precision machining of metal parts is speeded several times over conventional methods with this Single Motion Duplicator. This electronic robot "feels" contours of master pattern to control operation of machine tool. Hundreds of duplicate parts such as shafts, bearings, sheaves, rolls and rings can be turned on lathes. Device is applicable to die sinking machines and has been used on milling machines to produce cams of complicated design.

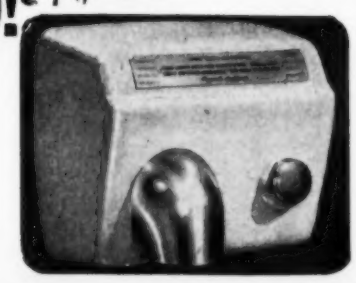
Control consists of follower, electronic control unit and output drive motor. Follower is a variable reluctance transducer whose electrical output varies in accordance with contours of template. Signal is amplified and detected in the electronic control unit, providing drive to the output motor. Device is applicable to all types of machine tools where single-motion control is feasible. Distributed by Voss Engineering Co., unit was developed by **Raytheon Mfg. Co.,** Dept. NED, Waltham 54, Mass.

▲ For more details circle **NED-5061** on enclosed inquiry slip ▲

DO YOU KNOW? Valuable suggestions including a free shower room layout plan are yours for the asking. If your plant has showers, this plan will show how to avoid mixing of dressed and wet bathers and to minimize traffic confusion. Available from Onox, Inc., 127 Second St., San Francisco 5, Calif.

▲ For more details circle **NED-5062** on enclosed inquiry slip ▲

NO { **Towels** **Mess** **Servicing**



With the perfected, automatic

NATIONAL HAND DRYER

—dries hands completely dry in 20 seconds!

Eliminates the constantly mounting cost of paper towels or towel service—no storage problem, no filling of cabinets, no removal, cleaning and disposal time or attention. No time when clean, sanitary drying service is not available.

Do you really know how much your wash room service is costing you?

One fast-acting, tamper-proof NATIONAL HAND DRYER serves 1½ to 2 wash basins, pays for its cost from actual cash outlays in 12 to 18 months, gives quick, soothing drying service at the touch of a button, and is rapidly winning preference in hand drying because of its fast pleasing action.

Let us show you an actual example of continuous cost savings with NATIONAL DRYERS over towels. Now Available for industrial users—220-volt single phase models.

National Dryer Sales Corporation
Dept. NE2-6, 616 West Adams St., Chicago 6

Without obligation, send complete information on National Hand Dryers and example of cost savings.

( ) Also send information on National Hair Dryers.

Name .....
Address .....
City ..... Zone ..... State .....

▲ For more details circle **NED-5063** on enclosed inquiry slip ▲

Need Conveyor Chain? NOW

We're In Position To Make
IMMEDIATE DELIVERY
X458 Drop-Forged Rivetless Conveyor Chain

Improved production and material conditions have enabled Jervis B. Webb Company to stock an adequate supply of X458 Chain—ready for immediate delivery—to meet your conveyor needs.

The No. X458 Drop-Forged Rivetless Chain for Trolley Conveyors (illustrated above) has the improved webbed side link which substantially stiffens it. Also, this type link prevents telescoping of the chain while in service. Simple and strong, it is cheaper and lighter per unit of ultimate strength than any other type of conveyor chain. It can be installed or removed by unskilled labor. Having no rivets, welds or bolts, X458 Chain requires no special or joining links and may be disconnected at any point, yet it is so designed that it cannot become disconnected while in service. No. X458 Chain is completely interchangeable with the Webb FIRST—the original No. 458 Chain designed in the early Twenties by Mr. Jervis B. Webb.

CONVEYOR ENGINEERS AND MANUFACTURERS

JERVIS B. WEBB COMPANY

8921 ALPINE AVE. DETROIT 4, MICH.
OFFICES IN PRINCIPAL CITIES

FACTORIES IN DETROIT . . . LOS ANGELES . . . HAMILTON, ONT.

▲ For more details circle **NED-5064** on enclosed inquiry slip ▲

ENGRAVE

PANELS OF ANY DIMENSIONS IN YOUR OWN SHOP WITH THE *Engravograph*

Portable Model I-S

The only portable machine which reproduces 15 sizes from one master alphabet.

The only one with adjustable copy holding slides for multiline engraving in one set-up.

Self-centering holding vise for nameplates.

Send for Booklets

I-S—26 portable model • H—26 heavy duty model

NEW HERMES, Inc. 13-19 University Place, N.Y. 3
In Canada: 359 St. James St., Montreal
World's Largest Manufacturer of Portable Engraving Machines

▲ For more details circle **NED-5065** on enclosed inquiry slip ▲

H. S. COVER, South Bend, Ind.

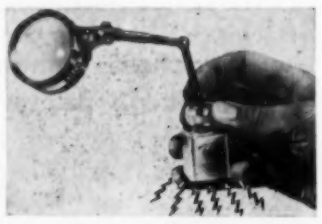
For more details circle NED-5066 on enclosed inquiry slip

SPEED MEASURING HEADS
used with tachometer instruments

Speeds ranging from 200 to 10,000 rpm can be measured with series 56M heavy duty heads for use with tachometer indicators, recorders and controls. They can be overspeeded two to ten times without damage. Stainless steel ¾-in. head shaft is supported on large sealed ball bearings. Head casting is anodized aluminum with ⅜-in. wall and heavy mounting feet. Working parts are enclosed against dirt, abrasives and liquids. Head can be 1000 ft from instrument. Made by **Metron Instrument Co.**, 436 Lincoln St., Denver 9, Colo.

For more details circle NED-5069 on enclosed inquiry slip

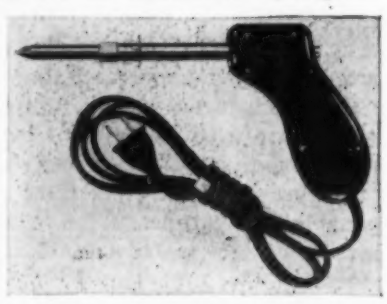
MAGNETIC BASE HOLDER
for magnifier and dial indicators



Attaching to curved or flat surfaces with a 50-lb pull, this magnetic base holder is used to hold magnifier or dial indicator. Miti-Mite No. 120 consists of magnetic base holder, four-power double lens magnifier and accessories for holding most small dial indicators. Base measures 1 x 1⅛ x 1½ in. and has flexible ball and socket swivel assembly for setting at any angle or position. Made by **Enco Mfg. Co.**, 4524 W. Fullerton Ave., Chicago 39, Ill.

For more details circle NED-5070 on enclosed inquiry slip

ELECTRIC SOLDERING IRON
heating element is located in tip



Hermetically sealed dual heating element of model A Vari-Hot electric soldering iron is located within alloy plated copper tip which is available in seven different shapes and can be changed by means of brass hex coupling ferrule nut. Iron draws only 25 w and maintains tip temperature of over 500° F without using booster button. Pressing booster increases input to 100 w for controllable tip temperature to 1000° F. Iron weighs 10 oz including 6-ft Coroprex cord set. Model R-115-A, 110-115-v ac-dc unit is for standard power circuit uses, while for aircraft and marine use, model R-28-A, 28-32-v ac-dc unit is available. Made by **Vari Corp.**, 625 Fourth Ave. S., Minneapolis 15, Minn.

For more details circle NED-5071 on enclosed inquiry slip

AIR VIBRATOR
moves wide range of materials

TYPE F

The CLEVELAND Type F Air Vibrator, illustrated herewith, is one of the basic types used in moving, settling or packaging a wide range of materials.

It is made in 6 sizes, from 1¼" piston diameter to 4" piston diameter, capable of handling materials from the smallest chute, bin or hopper to the largest of bulk storage bins.

The Type F Air Vibrator can move steel chips; dry colors; concrete; and fertilizer. It works equally well on sand, coal and soap; chipped ice and meat; wood chips; and almost any other material which is inclined to plug up, arch or bridge.

The Type F is easily installed by mounting or bolting through the skin of the hopper and a reinforcing plate. This distributes the impact of the vibration over a wider area and prevents distortion of the hopper skin.

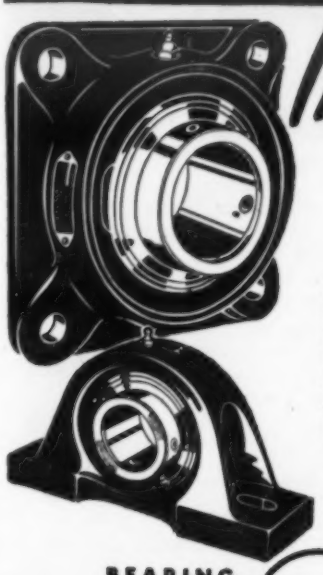
An air-cushioned semi-noiseless type is available where NOISE is a factor.

BIN Stuck Lately? Catalog No. 105 will give you further details. **The Cleveland Vibrator Co.**, 2745 Clinton Avenue, Cleveland 13, Ohio. Advt.

For more details circle NED-5072 on enclosed inquiry slip

• Flange Units
• Pillow Blocks
• Take-Up Units

SEALMASTER BALL BEARING UNITS



Improve

Any Bearing Application

Replace worn bearings with SealMasters. They give lasting service and economy. Only SealMaster bearings combine the features essential to smooth operation, long life, easy installation and top performance in quiet power transmission.

Write for Catalog 845

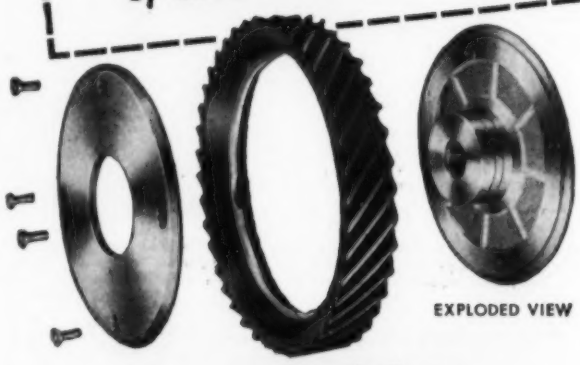
BEARING DIVISION
STEPHENS-ADAMSON MFG. CO.

Tellevel—Bin Level Controls · Car Loaders · Car Pullers · Winches · SealMaster Ball Bearings · Saco Speed Reducers

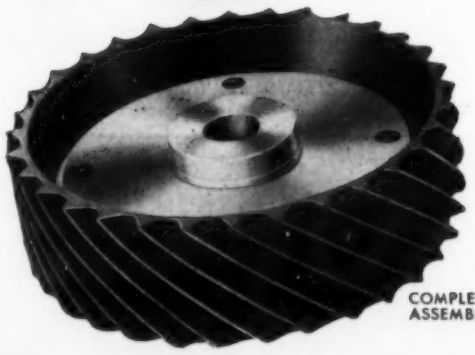
12 RIDGEWAY AVE., AURORA, ILLINOIS

For more details circle NED-5073 on enclosed inquiry slip

NEW "T-61"
UNIVERSAL HUB CONTACT WHEEL
by CARBORUNDUM



EXPLODED VIEW



COMPLETE ASSEMBLY

WHAT New "T-61" Hub Wheel can cut your contact wheel replacement costs squarely in half.

HOW Three part, simple assembly... Universal Hub and Side Plate—"T-61" serrated rubber "tire". When "tire" wears out, throw it away and replace with new tire at half the cost of entire new wheel.

WHY Perfect interchangeability. A single Hub will take 144 different tires of various width-and-hardness combinations. Each part of assembly is separately balanced—positive, perfect performance in any combination of Hub, tire and plate.

WHERE Everything from the roughest stock removal grinding to the finest flat or contoured surface finishing.

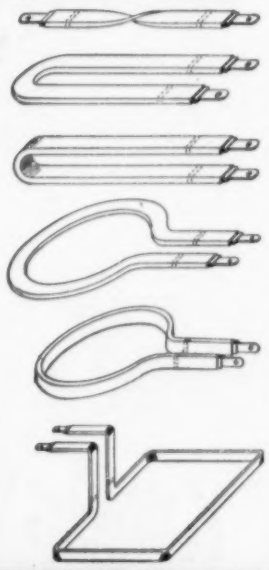
WHEN Right now! Switch to this new cost-cutter today... get in touch with your CARBORUNDUM or distributor salesman—or write Dept. NED 82-69.

Look to CARBORUNDUM
TRADE MARK
for the NEW developments in ALL abrasive methods

"Carborundum" is a registered trademark of The Carborundum Company, Niagara Falls, N. Y.

For more details circle NED-5074 on enclosed inquiry slip

SYNTRON
Thin—Flat
ELECTRIC HEATING ELEMENTS



For rapid, uniform heating of plates, pipes, platens, kettles, tanks, ovens, dies, dryers and ducts, by direct or indirect immersion or contact.

Available in two widths—in lengths from 9" to 124" and in most any volt and watt combination, the latter depending upon the application.

Can be furnished in various shapes—both their design and construction lend to flexibility in forming.

Write for literature—or send us the details of your heating problem.

SYNTRON CO.
405 Lexington Ave. Homer City, Pa.

For more details circle NED-5067 on enclosed inquiry slip

Save priceless production time! Renew old floors over the week-end to last for many years. Heavy traffic only packs denser. Non-skid, noiseless, spark-proof; bonds and feather-edges perfectly on concrete, wood or steel. Each Plastic Rock unit is complete; nothing else to buy; no guesswork; maintenance crew or contractor can apply.

Get free Bulletin N-6

UNITED LABORATORIES, INC.
16804 Euclid Avenue, Cleveland 12, Ohio
FLOORING • ROOFING • SPECIAL PAINTS
Field Representatives Coast to Coast

For more details circle NED-5068 on enclosed inquiry slip

FIRST CLASS
PERMIT NO. 36
Sec. 34.9 P. L. & R.
Cleveland, Ohio

BUSINESS REPLY ENVELOPE
No Postage Stamp Necessary if Mailed in the United States

4c POSTAGE WILL BE PAID BY—

NEW EQUIPMENT DIGEST
Penton Building
CLEVELAND 13, OHIO

Only those having an engineering, specifying or buying title and connected with a company listed in Dun & Bradstreet as a manufacturer or processer are qualified to receive NEW EQUIPMENT DIGEST on our regular mailing list. The only exceptions to this rule are key men of railroad, steamship and other transportation firms. NEW EQUIPMENT DIGEST is not sent to salesmen, representatives or other distributors.

Only inquiries from individuals who qualify under the above classifications will be serviced if sent to us.

IMPORTANT

Because we must check the distribution of NEW EQUIPMENT DIGEST at least once each year, please fill-in completely the coupon below. If you returned one of our regular mail questionnaires or an inquiry within the past year, you may omit this. The information you give will be held confidential and used only for verifying or correcting our circulation mailing list.

PLEASE FILL IN COMPLETELY—PRINT OR TYPEWRITE

Please send NEW EQUIPMENT DIGEST to me each month free of charge.

NAME ..... TITLE .....

COMPANY .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

Principal Products Manufactured .....

..... Approximate Number of Employees in Plant .....

Also send NEW EQUIPMENT DIGEST free to the following men in our company:

NAME ..... TITLE .....

NAME ..... TITLE .....

FOLD • SEAL • MAIL

Have You Filled-In Your Name and Address?

FOLD TO THIS LINE

To obtain additional information on any items in this issue of NEW EQUIPMENT DIGEST, circle numbers below which correspond with those of desired items. Your request will be forwarded promptly to manufacturer. Please give your name, title, company and address. This postage-free mailer should be folded as indicated for mailing.

5000	5050	5100	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850	5900	5950	6000	6050	6100	6150
5001	5051	5101	5151	5201	5251	5301	5351	5401	5451	5501	5551	5601	5651	5701	5751	5801	5851	5901	5951	6001	6051	6101	6151
5002	5052	5102	5152	5202	5252	5302	5352	5402	5452	5502	5552	5602	5652	5702	5752	5802	5852	5902	5952	6002	6052	6102	6152
5003	5053	5103	5153	5203	5253	5303	5353	5403	5453	5503	5553	5603	5653	5703	5753	5803	5853	5903	5953	6003	6053	6103	6153
5004	5054	5104	5154	5204	5254	5304	5354	5404	5454	5504	5554	5604	5654	5704	5754	5804	5854	5904	5954	6004	6054	6104	6154
5005	5055	5105	5155	5205	5255	5305	5355	5405	5455	5505	5555	5605	5655	5705	5755	5805	5855	5905	5955	6005	6055	6105	6155
5006	5056	5106	5156	5206	5256	5306	5356	5406	5456	5506	5556	5606	5656	5706	5756	5806	5856	5906	5956	6006	6056	6106	6156
5007	5057	5107	5157	5207	5257	5307	5357	5407	5457	5507	5557	5607	5657	5707	5757	5807	5857	5907	5957	6007	6057	6107	6157
5008	5058	5108	5158	5208	5258	5308	5358	5408	5458	5508	5558	5608	5658	5708	5758	5808	5858	5908	5958	6008	6058	6108	6158
5009	5059	5109	5159	5209	5259	5309	5359	5409	5459	5509	5559	5609	5659	5709	5759	5809	5859	5909	5959	6009	6059	6109	6159
5010	5060	5110	5160	5210	5260	5310	5360	5410	5460	5510	5560	5610	5660	5710	5760	5810	5860	5910	5960	6010	6060	6110	6160
5011	5061	5111	5161	5211	5261	5311	5361	5411	5461	5511	5561	5611	5661	5711	5761	5811	5861	5911	5961	6011	6061	6111	6161
5012	5062	5112	5162	5212	5262	5312	5362	5412	5462	5512	5562	5612	5662	5712	5762	5812	5862	5912	5962	6012	6062	6112	6162
5013	5063	5113	5163	5213	5263	5313	5363	5413	5463	5513	5563	5613	5663	5713	5763	5813	5863	5913	5963	6013	6063	6113	6163
5014	5064	5114	5164	5214	5264	5314	5364	5414	5464	5514	5564	5614	5664	5714	5764	5814	5864	5914	5964	6014	6064	6114	6164
5015	5065	5115	5165	5215	5265	5315	5365	5415	5465	5515	5565	5615	5665	5715	5765	5815	5865	5915	5965	6015	6065	6115	6165
5016	5066	5116	5166	5216	5266	5316	5366	5416	5466	5516	5566	5616	5666	5716	5766	5816	5866	5916	5966	6016	6066	6116	6166
5017	5067	5117	5167	5217	5267	5317	5367	5417	5467	5517	5567	5617	5667	5717	5767	5817	5867	5917	5967	6017	6067	6117	6167
5018	5068	5118	5168	5218	5268	5318	5368	5418	5468	5518	5568	5618	5668	5718	5768	5818	5868	5918	5968	6018	6068	6118	6168
5019	5069	5119	5169	5219	5269	5319	5369	5419	5469	5519	5569	5619	5669	5719	5769	5819	5869	5919	5969	6019	6069	6119	6169

FOLD TO THIS LINE

5020	5070	5120	5170	5220	5270	5320	5370	5420	5470	5520	5570	5620	5670	5720	5770	5820	5870	5920	5970	6020	6070	6120	6170
5021	5071	5121	5171	5221	5271	5321	5371	5421	5471	5521	5571	5621	5671	5721	5771	5821	5871	5921	5971	6021	6071	6121	6171
5022	5072	5122	5172	5222	5272	5322	5372	5422	5472	5522	5572	5622	5672	5722	5772	5822	5872	5922	5972	6022	6072	6122	6172
5023	5073	5123	5173	5223	5273	5323	5373	5423	5473	5523	5573	5623	5673	5723	5773	5823	5873	5923	5973	6023	6073	6123	6173
5024	5074	5124	5174	5224	5274	5324	5374	5424	5474	5524	5574	5624	5674	5724	5774	5824	5874	5924	5974	6024	6074	6124	6174
5025	5075	5125	5175	5225	5275	5325	5375	5425	5475	5525	5575	5625	5675	5725	5775	5825	5875	5925	5975	6025	6075	6125	6175
5026	5076	5126	5176	5226	5276	5326	5376	5426	5476	5526	5576	5626	5676	5726	5776	5826	5876	5926	5976	6026	6076	6126	6176
5027	5077	5127	5177	5227	5277	5327	5377	5427	5477	5527	5577	5627	5677	5727	5777	5827	5877	5927	5977	6027	6077	6127	6177
5028	5078	5128	5178	5228	5278	5328	5378	5428	5478	5528	5578	5628	5678	5728	5778	5828	5878	5928	5978	6028	6078	6128	6178
5029	5079	5129	5179	5229	5279	5329	5379	5429	5479	5529	5579	5629	5679	5729	5779	5829	5879	5929	5979	6029	6079	6129	6179
5030	5080	5130	5180	5230	5280	5330	5380	5430	5480	5530	5580	5630	5680	5730	5780	5830	5880	5930	5980	6030	6080	6130	6180
5031	5081	5131	5181	5231	5281	5331	5381	5431	5481	5531	5581	5631	5681	5731	5781	5831	5881	5931	5981	6031	6081	6131	6181
5032	5082	5132	5182	5232	5282	5332	5382	5432	5482	5532	5582	5632	5682	5732	5782	5832	5882	5932	5982	6032	6082	6132	6182
5033	5083	5133	5183	5233	5283	5333	5383	5433	5483	5533	5583	5633	5683	5733	5783	5833	5883	5933	5983	6033	6083	6133	6183
5034	5084	5134	5184	5234	5284	5334	5384	5434	5484	5534	5584	5634	5684	5734	5784	5834	5884	5934	5984	6034	6084	6134	6184
5035	5085	5135	5185	5235	5285	5335	5385	5435	5485	5535	5585	5635	5685	5735	5785	5835	5885	5935	5985	6035	6085	6135	6185
5036	5086	5136	5186	5236	5286	5336	5386	5436	5486	5536	5586	5636	5686	5736	5786	5836	5886	5936	5986	6036	6086	6136	6186
5037	5087	5137	5187	5237	5287	5337	5387	5437	5487	5537	5587	5637	5687	5737	5787	5837	5887	5937	5987	6037	6087	6137	6187
5038	5088	5138	5188	5238	5288	5338	5388	5438	5488	5538	5588	5638	5688	5738	5788	5838	5888	5938	5988	6038	6088	6138	6188
5039	5089	5139	5189	5239	5289	5339	5389	5439	5489	5539	5589	5639	5689	5739	5789	5839	5889	5939	5989	6039	6089	6139	6189
5040	5090	5140	5190	5240	5290	5340	5390	5440	5490	5540	5590	5640	5690	5740	5790	5840	5890	5940	5990	6040	6090	6140	6190
5041	5091	5141	5191	5241	5291	5341	5391	5441	5491	5541	5591	5641	5691	5741	5791	5841	5891	5941	5991	6041	6091	6141	6191
5042	5092	5142	5192	5242	5292	5342	5392	5442	5492	5442	5592	5642	5692	5742	5792	5842	5892	5942	5992	6042	6092	6142	6192
5043	5093	5143	5193	5243	5293	5343	5393	5443	5493	5543	5593	5643	5693	5743	5793	5843	5893	5943	5993	6043	6093	6143	6193
5044	5094	5144	5194	5244	5294	5344	5394	5444	5494	5544	5594	5644	5694	5744	5794	5844	5894	5944	5994	6044	6094	6144	6194

FOLD ON THIS LINE

5045	5095	5145	5195	5245	5295	5345	5395	5445	5495	5545	5595	5645	5695	5745	5795	5845	5895	5945	5995	6045	6095	6145	6195
5046	5096	5146	5196	5246	5296	5346	5396	5446	5496	5546	5596	5646	5696	5746	5796	5846	5896	5946	5996	6046	6096	6146	6196
5047	5097	5147	5197	5247	5297	5347	5397	5447	5497	5547	5597	5647	5697	5747	5797	5847	5897	5947	5997	6047	6097	6147	6197
5048	5098	5148	5198	5248	5298	5348	5398	5448	5498	5548	5598	5648	5698	5748	5798	5848	5898	5948	5998	6048	6098	6148	6198
5049	5099	5149	5199	5249	5299	5349	5399	5449	5499	5549	5599	5649	5699	5749	5799	5849	5899	5949	5999	6049	6099	6149	6199

PLEASE FILL IN COMPLETELY—PRINT OR TYPEWRITE

—USE THIS SLIP FOR JUNE 1952 ISSUE ONLY—

62

NAME ..... TITLE .....

COMPANY .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

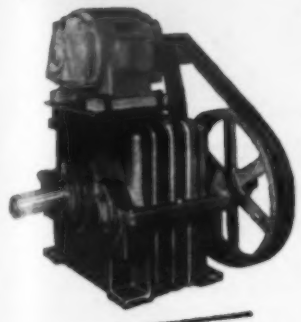
Principal Products Manufactured .....

..... Approx. Number of Employees in Plant .....

Check Invested Capital Rating of Your Company

- ☐ Over $1,000,000
- ☐ $500,000 to $1,000,000
- ☐ $200,000 to $500,000
- ☐ $75,000 to $200,000
- ☐ Under $75,000

SACO SPEED REDUCERS



SIMPLIFY DRIVE PROBLEMS

Adapt standard motors to the best speed for every job. Any reduction ratio between 10 to 1 and 60 to 1 is possible with a Saco Reducer by an easy change of sheaves on the V-belt drive.

Almost any full speed motor can be mounted on top or end of reducer. Pivoted motor base permits easy adjustment of belt tension, saves floor space and simplifies installation. Steel helical gears and ball bearings give long life and top efficiency.

The wide range of output speeds possible with a Saco Speed Reducer will allow the use of standard, full speed motors on a wide variety of jobs.
Two reductions attained (1) through V belts, (2) through steel helical gears.

Write for Catalog 643

STEPHENS-ADAMSON MFG. CO.

Tellevel—Bin Level Controls · SealMaster Ball Bearings · Car Loaders · Car Pullers · Winches · Variable Speed Reducers · Saco Speed Reducers

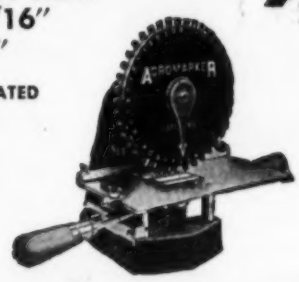
12 RIDGEWAY AVE., AURORA, ILL.

For more details circle NED-5075 on enclosed inquiry slip

ACROMARK MEANS "ACCURATE MARKING"

THE ACROMARKER NAME PLATE AND PARTS STAMPING MACHINE COMES IN SIZES FROM 1/16" TO 3/16"

HAND OPERATED AND FOOT MODELS



NON-TIRING FAST-MAKES PERFECT STAMPING OF LETTERING & NUMBERING EASY AS DRIVING A CAR

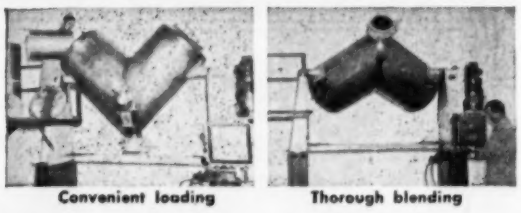
DIE WHEELS AND DIES ARE REPLACEABLE.

The ACROMARK Company

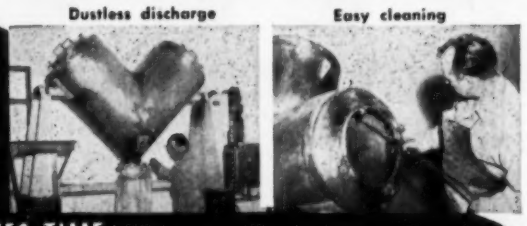
7-11 MORRELL ST., ELIZABETH 4, N. J.

"THE ORIGINAL MARKING SPECIALISTS"

For more details circle NED-5076 on enclosed inquiry slip



Convenient loading · Thorough blending



Dustless discharge · Easy cleaning

SAVES TIME
PROVIDES UNIFORMITY for GANE'S chemicals

By switching to a p-k Twin Shell Dry Blender, Gane's Chemical Works, Inc., accomplished TWO things when blending drugs:

They reduced TIME—from 4 hours to 10 minutes!

They obtained product UNIFORMITY—not before obtainable—where it is absolutely essential.

If you blend dry materials, we'll run tests for you on the easy-to-load, easy-to-clean p-k Twin Shell Dry Blender to prove these advantages.

In the meantime, send for Catalogs 401 (production) and 402 (laboratory), for complete engineering data.

the Patterson-Kelley Co., Inc.

760 Burson St.
E. Stroudsburg, Penna.

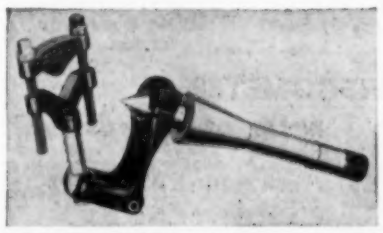
For more details circle NED-5077 on enclosed inquiry slip

ACOUSTIC PHONE BOOTH shields head and shoulders

With double the density of sound absorbing material used in previous acoustic booth models, this improved doorless Scout model Acousti-Booth has loudness reduction comparable to full length booth. Booth shields head and shoulders of phone user and finds wide application in utilities, refineries, manufacturing establishments and steel plants where extraneous noise is prevalent. Made by **Burgess-Manning Co.**, Architectural Products Div., 5970 Northwest Highway, Chicago, Ill.

For more details circle NED-5078 on enclosed inquiry slip

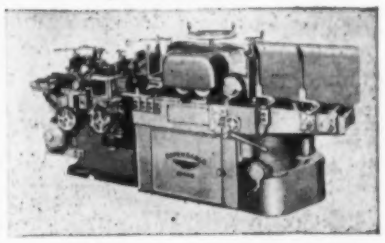
MACHINE DOG & DRIVER for milling machine operations



Accurate spacing on milling machine taper work and spiral cutting is provided by this dog and driver tool which banishes lost motion, cramping and binding. Action of hardened ball sliding on hardened stud between ground jaws acts as universal ball and socket joint. Movable parts of jaw provide work contact without torsional strain. Tools are supplied in style No. 130 for ¼ to 2 in. capacity and style No. 132 for ¾ to 2⅜-in. capacity. They are complete with either No. 10 or 11 Brown & Sharpe, No. 40 standard milling or any other special taper as required. Made by **Ready Tool Co.**, 554-D Iranistan Ave., Bridgeport 5, Conn.

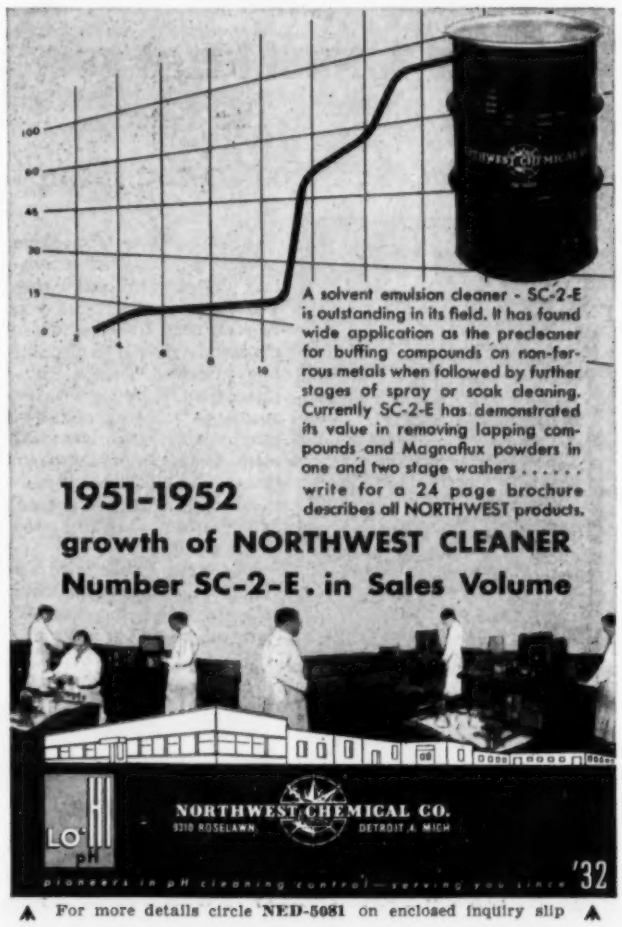
For more details circle NED-5079 on enclosed inquiry slip

HOPPER FEED for wood working molders



Random length hopper feed for use with three models of Electro - Unit drive wood working molders is designed to accommodate short, long, thick, thin, narrow and wide wood stock with equal ease of feed. Hopper takes stock up to 48 in. long, 4½ in. thick and to standard width of molder. It is driven by the molder and synchronized with it. Rate of speed can be varied between 20 and 150 fpm. Made by **Dependable Machine Co.**, 200 High Point Rd., Greensboro, N. C.

For more details circle NED-5080 on enclosed inquiry slip



A solvent emulsion cleaner - SC-2-E is outstanding in its field. It has found wide application as the precleaner for buffing compounds on non-ferrous metals when followed by further stages of spray or soak cleaning. Currently SC-2-E has demonstrated its value in removing lapping compounds and Magnaflux powders in one and two stage washers . . . . . write for a 24 page brochure describes all NORTHWEST products.

1951-1952 growth of NORTHWEST CLEANER Number SC-2-E. in Sales Volume

NORTHWEST CHEMICAL CO.
9310 ROSELAWN · DETROIT 4, MICH.

LO pH HI

pioneers in pH cleaning control—serving you since '32

For more details circle NED-5081 on enclosed inquiry slip

"Tops them all" and SAVES 90% OF COSTS WITH RAYTHEON WELDPOWER®

Attaching small steel balls to these special gage shanks presented a problem — until the Barden Corporation of Danbury, Conn. applied a Raytheon WELDPOWER Unit to this delicate job. Now steel balls, ranging in size from 1/16" to ¼" in diameter, are quickly, cleanly and accurately welded — yet easily removed when necessary without damage to the shanks. The 90% savings per year equals the cost of the Unit itself, proof that WELDPOWER pays its way over and over in time saved, better production and fewer rejects.

Learn the many advantages of joining ferrous, non-ferrous or dissimilar metals with Raytheon Condenser Weldpower Control Units. Available in 3 sizes with appropriate Weldpower Heads.

Send sample parts or write for details to Dept. 6470. NE-6

RAYTHEON — Excellence in Electronics

RAYTHEON MANUFACTURING COMPANY
Equipment Sales Division, Waltham 54, Mass.
DISTRICT OFFICES: Boston • New York • Cleveland • Chicago • New Orleans • Los Angeles (Wilmington) • San Francisco • Seattle
INTERNATIONAL DIVISION, 19 RECTOR STREET, NEW YORK CITY

For more details circle NED-5082 on enclosed inquiry slip

A FAST WAY TO REDUCE COSTS

Capacities from ⅛ to 1 ton
110, 220 or 440 volts

Hundreds of plants are cutting overhead with the CM COMET . . . a sturdy, high-speed, portable electric hoist. All working parts fully enclosed and permanently lubricated. Don't buy until you see the CM COMET. Ask your local distributor for a demonstration.

Write for Bulletin 138 Get all the facts

CHISHOLM-MOORE HOIST CORPORATION

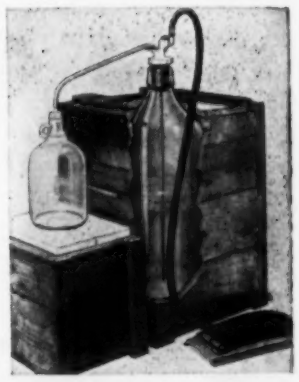
(Affiliated with Columbus McKinnon Chain Corporation)

GENERAL OFFICES AND FACTORIES: TONAWANDA, N. Y.
SALES OFFICES: New York • Chicago • Cleveland • San Francisco • Los Angeles

For more details circle NED-5083 on enclosed inquiry slip

PUMP corrosive liquids SAFELY

no lift
no tilt
no spurt
no splash



Type FH—$15.50

WRITE for big 48 pg. Catalog illustrating, describing and pricing hundreds of safety items.

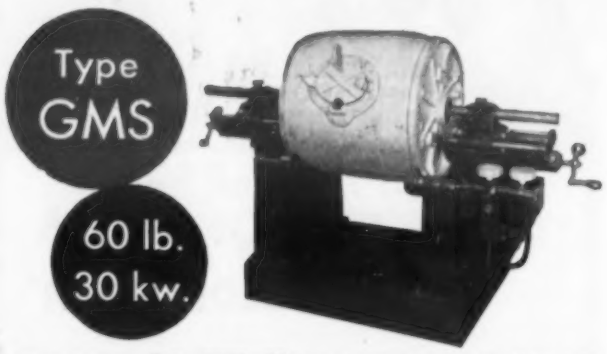
The hazards of acid handling are minimized by this simple, efficient G S Acid Pump. A smooth flow starts quickly, can be stopped instantly. Foot or hand operated. No dangerous pressure build up. Lifting and tilting are eliminated. For carboys, drums, barrels. All corrosion resistant materials. Low Cost.

GENERAL SCIENTIFIC EQUIPMENT CO.
2701 W. HUNTINGDON ST., PHILADELPHIA 32, PA.

SAFETY EQUIPMENT FOR EVERY HAZARD

For more details circle NED-5084 on enclosed inquiry slip

All the refinements of its big brothers!



DETROIT ROCKING ELECTRIC FURNACE

This compact, efficient 60-lb. furnace has all the features of the famous, large capacity Detroit Electric Furnaces that melt metal for world famous products. Type GMS produces uniform, high quality melts with efficient and economical use of power. It's excellent for limited production, and for experimental and educational use. New rocking controller, 3-phase motor and independently-mounted electrode brackets are new features . . . Sold complete with transformer. Write for information.

DETROIT ELECTRIC FURNACE DIVISION
KUHLMAN ELECTRIC COMPANY
1060 26th St. • BAY CITY, MICHIGAN

Foreign Representatives: In BRAZIL—Equipamentos Industrias, "Elsa" Ltd., Sao Paulo; CHILE, ARGENTINA, PERU and VENEZUELA: M. Castellvi Inc., 150 Broadway, New York 7, N. Y.; MEXICO: Cia Proveedora de Industrias, Atenas 32-13, Apartado 27A3, Mexico 6, D. F., Mexico; EUROPE, ENGLAND: Biriec, Ltd., Birmingham.

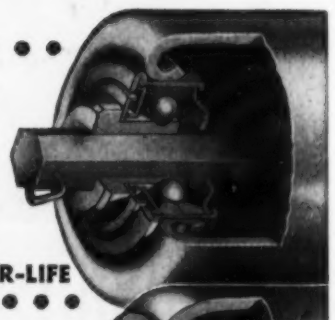
▲ For more details circle NED-5085 on enclosed inquiry slip ▲

Buschman ROLLER CONVEYORS

Better Built "HEART" of the roller

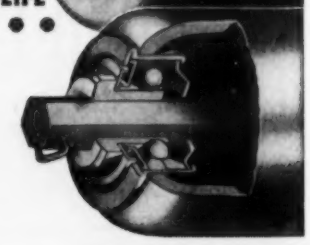
...assures longer, low-cost service

DUSTPROOF



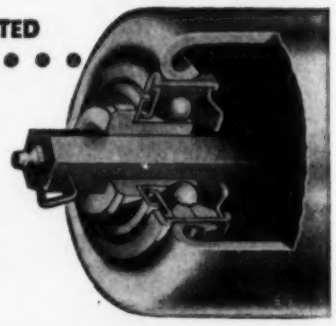
Labyrinth sealed "dry" bearings keep dust out, insure free-running rollers through many years.

GREASE-PACKED-FOR-LIFE



Ideal for heavy duty operation, indoors or out. Lubricated at the factory, labyrinth sealed and dust-proof.

PRESSURE LUBRICATED



Required where rollers are subjected to severe heat or excessive abrasive materials. Alemite re-lubricated. Truarc seal retains grease.

The bearing is the heart of the roller and BUSCHMAN Roller Conveyors have improved design bearings for all types of service. Get the inside facts about roller conveyors performance tested for long, low-cost service in every industry. Write for Bulletin No. 60.

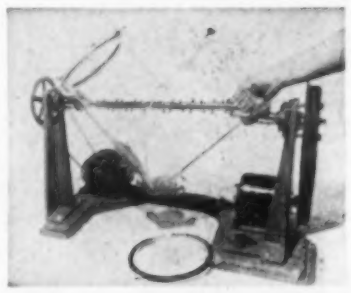
THE E. W. BUSCHMAN COMPANY

PRODUCE MORE ... FOR LESS on Buschman Conveyors

Spring Grove at Winton Place
Cincinnati 32, Ohio

▲ For more details circle NED-5086 on enclosed inquiry slip ▲

POWDER BLENDER has belt-driven rotating bar



Compounds, pigments, insecticides, metal and plastic powders, ceramic glazes, explosives, detergents and dyes are among bulk materials which can be mixed efficiently by the Twin-Shell blender. Unit features rotating Intensifier bar which improves mixing action by breaking up lumps, dispersing materials which tend to agglomerate and homogenizing liquids into solid mixes. Metal bar which is belt-driven by separate motor is located so that its cylindrical lugs act only on top layer of material being mixed. Blender rotation supplies fresh material to impact and shearing action of lugs, the peripheral speed of which is 2500 ft per minute. Bar is available on all units up to 60 cu ft size. Made by **Patterson-Kelley Co.,** 492 Warren St., East Stroudsburg, Pa.

▲ For more details circle NED-5087 on enclosed inquiry slip ▲

EIGHT-SPEED VISCOMETER has 200 to 1 ratio of speeds

Practical for wide range viscosity measurement directly in centipoises, eight-speed model LVT viscometer has 200 to 1 ratio of speeds starting at 0.3-rpm. Equipped with UL adapter for special amplifying effects, meter can measure viscosity between 0.5 to 2 million cps. Ten other single and four-speed models are available in ratings up to 600 rpm. Portable for use in plants and laboratories, all models feature attached bubble level for leveling either in laboratory stand or when making point-of-process determinations. Meters can be explosionproof, if desired, and come equipped with set of spindles, spindle holder, and carrying case. Made by **Brookfield Engineering Laboratories, Inc.,** 004 Porter St., Stoughton, Mass.

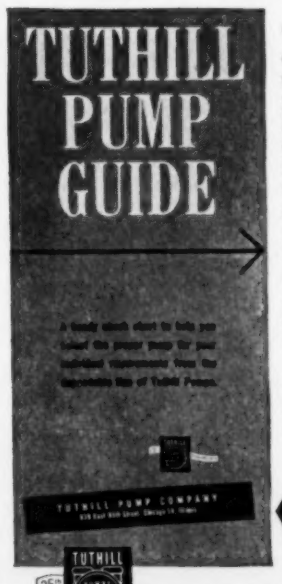
▲ For more details circle NED-5088 on enclosed inquiry slip ▲

DO YOU KNOW? If your manufacturing processes involve precision measurement or inspection, you'll profit by viewing the new color-sound 16-mm motion picture "What's the Difference?" The complete story of the optical comparator and its uses is shown. To book this picture, write to Jones & Lamson Machine Co., Dept. 710M, 160 Clinton St., Springfield, Vt.

▲ For more details circle NED-5089 on enclosed inquiry slip ▲

HOW TUTHILL HELPS YOU

Fit the Pump to the Need...
Not the Need to the Pump!



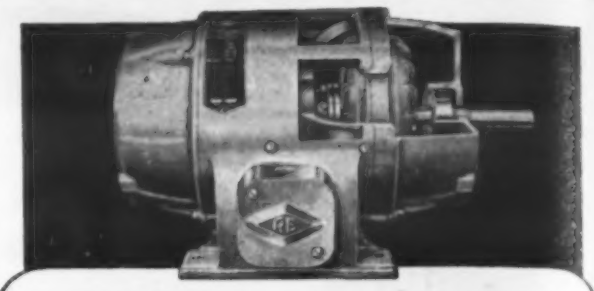
The Tuthill line of positive displacement internal-gear rotary pumps is so flexible that you can find just the pump to fit your need for lubrication, coolant, hydraulic service and liquid transfer. There are mechanically sealed pumps—automatic reversing models—pumps with internal by-pass feature—and stripped models that can be built directly into the design of your equipment. So why attempt to fit the need to the pump?

The new Tuthill Pump Guide provides a quick reference chart to help select the right oil pump for your job.

WRITE FOR YOUR COPY TODAY!

25th Anniversary TUTHILL PUMP COMPANY
939 East 95th Street, Chicago 19, Illinois

▲ For more details circle NED-5090 on enclosed inquiry slip ▲



NEW FLUID-SHAFT MOTOR GIVES SMOOTH LOAD ACCELERATION ...ELIMINATES NEED FOR CLUTCHES!

Reuland Fluid-Shaft motor with double reduction gear reducer.

Write for new Engineering Folder No. 2000-6.

REULAND FLUID-SHAFT ELECTRIC MOTORS are the only units with an *integral fluid coupling*. Their cost is much less than a conventional motor with drive attachment, and their ability to "take it" has already been proved on heavy jobs, including mixers, centrifugals and cranes.

Fluid-Shaft motors accelerate heavy loads smoothly without the aid of mechanical clutches. Overloads are eliminated. *Will start heavier loads than regular motors of comparable horsepower!*

• Protection against "jamming" • Reduces maintenance
• No need to overmotor to start heavy loads • Wide H. P. range
• Uses less starting current • Shorter mounting dimensions

REULAND ELECTRIC CO.
ALHAMBRA, CALIFORNIA • DISTRIBUTORS IN PRINCIPAL CITIES

▲ For more details circle NED-5091 on enclosed inquiry slip ▲

WHAT ARE YOUR MAGNETIC SEPARATOR PROBLEMS?

Remington Rand, Inc., Tabulating Machine Division, Ilion, New York, are one of many manufacturers using Homer Magnetic Separators to cut sorting and handling costs in the processing of ferrous metal parts.

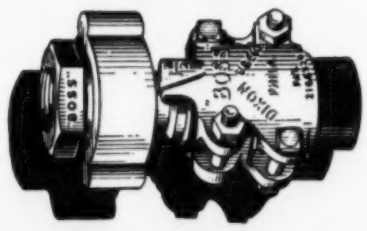
In the operation above, ferrous tabulating machine parts are quickly sorted from abrasive tumbling stones, saving many valuable man hours, and permitting the handling of larger quantities of finished parts. If you have a similar problem—consult us at once—Homer Engineers will be glad to recommend the type of magnetic equipment you need. Bulletins upon request.

Homer **The HOMER MANUFACTURING CO., Inc.**
Dept. 1-25 LIMA, OHIO

Producers of Magnetic Separator Equipment Since 1923

▲ For more details circle NED-5092 on enclosed inquiry slip ▲

"BOSS"



WASHER TYPE FEMALE COUPLING

STYLE W-16

For leakproof, durable connections on hose for every service—steam, air, gas, water, oil, butane, hydraulics—high or low pressure. Furnished with super-strong "Boss" Offset and Interlocking Clamps. All parts (except washer) steel or malleable iron, rustproofed. Deep corrugations on stem smoothly rounded to prevent damage to hose tube. Sizes ¼" to 6", inclusive.

From Your Hose Supplier or Industrial Distributor

DIXON VALVE & COUPLING CO.
PRODUCERS OF *The Quality Line* COUPLINGS • NIPPLES • MENDERS • CLAMPS
"BOSS" "GJ-BOSS" "DIXON" "KING" "AIR KING" "DIX-LOCK"
PHILADELPHIA, PA. BRANCHES: CHICAGO • BIRMINGHAM • LOS ANGELES • HOUSTON

▲ For more details circle NED-5093 on enclosed inquiry slip ▲

SOUND THE ALARM
where air pressure failure is important

the new, automatic low pressure air alarm for compressed air systems

Blows continuous shrill whistle when air line pressure drops below pre-selected value. Automatically stops blowing when pressure is restored. Completely mechanical; entirely self contained; requires no auxiliaries. Fig. 130, Industrial Model, illustrated, is only 4½" high over-all. Price $12.75. Fig. 140, Heavy Duty Model, of heavier construction and louder alarm, 7" high over-all. Price $28.85.

Distributorships Open

AIRLARM P. O. BOX 13034 HOUSTON 19, TEX.

For more details circle NED-5094 on enclosed inquiry slip

HINGED PLATEGRIP
BELT FASTENER No. 500

For Heavy Conveyor Belts of changing length

These heavy-duty belt fasteners make a strong, flexible joint in conveyor belts, belts of any width and of from ⅜" to ½" thickness. They offer special advantages in mines, quarries or industrial set-ups where length of position of belt is frequently changed, because sections can be removed or added at will. Joints are opened for this purpose by simply pulling out the hinge pin.

Easily and quickly applied on the job or in the shop. Special design gives deep compression into belting and smooth, flush joint.

Write for Circular

ARMSTRONG BRAY & CO.
5364 Northwest Highway • CHICAGO 30, U.S.A.

For more details circle NED-5095 on enclosed inquiry slip

ENAMELSTRIP

STEEL · ALUMINUM · BRASS · PRE-FINISHED COLOR COIL

assures a perfect finish before fabricating

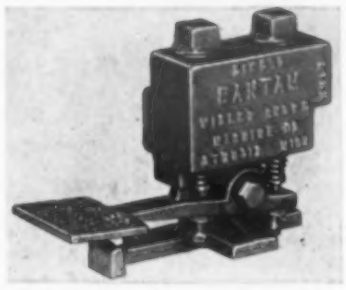
You can easily cut production time and cost with Enamelstrip, the continuous-feed, pre-colored metal coil. Leading manufacturers of metal products are using it with outstanding results in a wide variety of items. Enamelstrip's exclusive, flexible finish withstands the stresses of drawing, bending and forming without cracking or peeling. Many companies have entirely eliminated their finishing departments! Any metal in any finish will be coated and slit to your own specifications.

Write TODAY for detailed color bulletin.

THE COATED COIL CORPORATION
507 West 30th Street, New York 1 • LOngacre 5-3161

For more details circle NED-5096 on enclosed inquiry slip

FOUR-WAY AIR VALVE
is foot, finger tip or cam operated



By only one change in the lever, the Sincro Bantam spring return air valve can be foot, hand or cam operated. Operating on 0 to 100 psi line pressure, valve provides four-way, three-way normally-open, or three-way normally-closed operation with speed control in either or both directions. Plugging one cylinder port changes valve from four-way to three-way function. For each direction of cylinder travel, an adjusting screw throttles the exhaust air to assure smooth action. Neoprene poppet valves seal against brass and stainless seats, and O-rings impregnated with Gorlube complete the sliding seals. Although only 4 in. high and 5¾ in. long (with foot lever), valve can provide fast action to cylinders with up to 3 or 4-in. diameters. Made by **Wisler Engineering & Machine Co.**, 405 W. West St., Sturgis, Mich.

For more details circle NED-5097 on enclosed inquiry slip

RAILWAY ENTRY DOORS
can be made to fold out or in

Requiring only 25 seconds to open or close, these 32 x 22 ft four-fold double railway entry doors can be made to fold out or in, depending upon clearance. Constant pressure switch requires the operator to hold the switch in operating position until door motion is completed. Doors are 2⅜-in. Douglas fir weighing 1500 lb per section. Three-hp motors operate each side independently. They operate on 36 Timken bearings on side hinges which completely support the doors. Four trolleys suspended from 2-in. I-beams guide the doors at the center. Only 25-lb pressure is needed to operate doors manually. Rubber drag makes them draftproof. Made by **Electric Power Door Co.**, Dept. NED, 2127 E. Lake St., Minneapolis 7, Minn.

For more details circle NED-5098 on enclosed inquiry slip

DO YOU KNOW? "Serves You Right!" is the provocative title of 16-mm sound motion picture which shows how a number of industrial concerns have effected new efficiencies and marked economies by employing fork-lift trucks and towing tractors in plant maintenance operations. Film is offered on a loan basis by Clark Equipment Co., Industrial Truck Div., 1952 Arze St., Battle Creek, Mich.

For more details circle NED-5099 on enclosed inquiry slip

DON'T SCRAP IT!
LET "GLOVCO" RECONDITION IT
(LEATHER OR FABRIC)

DUST COLLECTOR BAGS • CONVEYOR BELTING
TARPAULINS • DROP CLOTHS • FILTER PADS

At a mere fraction the cost of replacement, we clean and professionally repair these and many other items, restoring them to new usefulness. Our pick-up and delivery plan in most industrial areas eliminates mechanical difficulties making this reconditioning plan work smoothly and to your complete advantage.

DIRTY WORN WORK GLOVES RECONDITIONED LIKE NEW

BEFORE AFTER

Our work glove reconditioning plan includes: pick-up, cleaning and sterilizing, repairing, reshaping, pairing, packaging and delivery. Users of the service record savings up to 49% in work glove costs. We will be glad to demonstrate this service at no cost to you. Representatives in all industrial areas

U. S. INDUSTRIAL GLOVE CORP.
9352 Roselawn Ave. Detroit 4, Mich.

For more details circle NED-5100 on enclosed inquiry slip

ZIP OFF

with AURAND CLEANING TOOLS

Get the time and money-saving facts

AURAND rotary chipping action quickly, easily, thoroughly removes scale, paint, rust, and other accumulation from any hard surface. Renewable cutter heads and fool-proof cutting depth adjustment allow the unskilled operator to produce perfectly clean surfaces. Available in electric or pneumatic models. Write today for further information on cleaning your iron, steel, brick, concrete, and other hard surfaces.

WRITE TODAY TO DEPT. 14

AURAND MFG. & EQUIP. CO.
2643 Colerain Avenue • CINCINNATI, OHIO

For more details circle NED-5101 on enclosed inquiry slip

"If the Control of Air Flow Is Your Problem, Too"...
SEE HONEYWELL FOR DAMPERS

HONEYWELL DAMPERS are custom-built to job specifications . . . in any size, shape or blade arrangement . . . with Honeywell electric or pneumatic positioners, or for manual operation.

Ideal for the control of air flow or to mix air of different temperatures, they are being used throughout industry . . . on cooling towers, engine test cells, recirculating ovens, foundry and paint room exhausts, drying kilns, and countless other places.

Call in our local engineering representative for a discussion of your requirements . . . he is as near as your phone. MINNEAPOLIS-HONEYWELL REGULATOR CO., *Industrial Division*, 4529 Wayne Ave., Philadelphia 44, Pa.

MINNEAPOLIS Honeywell
First in Controls

• *Important Reference Data*
Write today for a copy of new Bulletin 8502.

For more details circle NED-5102 on enclosed inquiry slip

MAGNET WIRE WITH THE WORKABILITY FOR FAST, LOW COST WINDING

Here's wire of proved workability when subjected to the punishment of modern high speed winding—whether random or layer. It helps insure freedom from broken wires, crossed turns, runbacks, spaced turns and frequent tension adjustments.

Essex Extra Test has the good slip necessary in coil winding. Slides evenly and smoothly in place, resulting in maximum turns in minimum space and in coils that will pack tight. When used for motor armatures, no matter how narrow the slots, Essex extra abrasion resistance reduces rejections.

When you specify Essex Extra-Test Magnet Wire for any winding job you can be sure.

ESSEX WIRE CORPORATION
FORT WAYNE 6, INDIANA

WAREHOUSES* AND SALES OFFICES: *Atlanta, Ga.; *Boston, Mass.; *Chicago, Illinois; Cleveland, Ohio; Dallas, Texas; Detroit, Michigan; Indianapolis, Indiana; *Kansas City, Mo.; *Los Angeles, Calif.; *Newark, N.J.; *Portland, Oregon; Upper Darby, Philadelphia, Pa.; *Saint Louis, Missouri; *San Diego, California; *San Francisco, California

For more details circle NED-5103 on enclosed inquiry slip

FOR MATERIAL HANDLING—
more and more—the swing is to wide-base pneumatic tires

GENERAL
INDUSTRIAL PNEUMATIC TIRES

More Designers are specifying wide-base General Pneumatics. They know Generals add these extra selling points to handling equipment.

SAVE TIME · MONEY · LABOR

- MORE LOAD CAPACITY AT LOW OR HIGH SPEEDS
- CUSHION EQUIPMENT AND LOADS REDUCING BREAKAGE AND SPILLAGE
- SAVE HIGH COST FLOORS AND FLOOR SURFACES
- SLOW, EVEN WEAR FOR LONG SERVICE
- HIGH FLOTATION FOR EASIER ROLLING OVER SOFT GROUND
- ROLLS EASIER, SMOOTHER OVER ALL SURFACES

Available separately or in assemblies of Tires, Tubes and Wheels. Size O.D. 8" to 27"—200 to 4000 lbs. cap. for low or high speeds.

Rigid CASTER FORKS Swivel

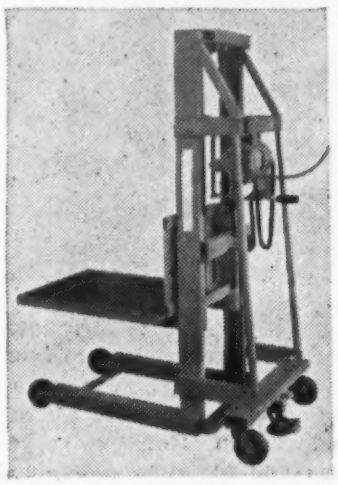
Wide-base caster forks engineered to carry heavier loads without adding dead weight to equipment. Available in identical pairs in a wide range of sizes.

SEND FOR CATALOG . . . DEPT. 4

THE GENERAL TIRE & RUBBER CO. AKRON, O.

For more details circle NED-5104 on enclosed inquiry slip

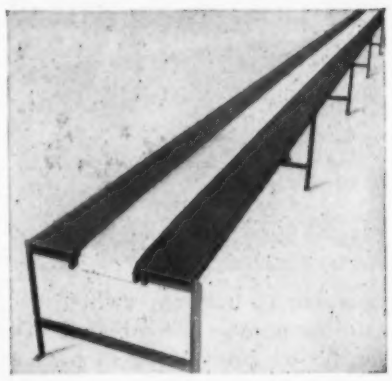
MOTORIZED STACKER
capable of handling 1000 lb loads



Loads up to 1000 lb can be elevated and stacked by the Powrlift machine, a stock item. Electric model is driven by a ½-hp reversing motor with drum type controller. The brakes are elevator type and platform is chain-raised and lowered at 17 fpm with automatic mechanical stops. Battery model has a 6-v electric-hydraulic drive. It lifts at 11 fpm and has fast hydraulic lowering. Dimensions are 37 x 32 x 81 in. and lift is from 5 to 60 in. Portable and stationary models are offered in platform, fork, inverted, roller bed, pan, arm skid lift and dumper types. Made by **Langley Mfg. Co.**, 930 Cambridge St., Cambridge, Mass.

For more details circle NED-5105 on enclosed inquiry slip

TABLE CONVEYORS
with rubber, cotton or canvas belts



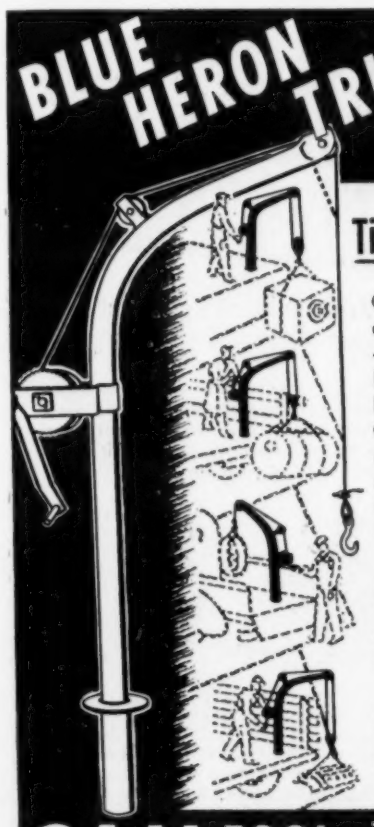
Widths from 6 to 36 in. are available in line of table conveyors manufactured with rubber, solid woven cotton or stitched canvas belts. Height of table is 32 or 36 in., with other heights to order. Conveyors can be equipped with leaves on one or both sides and can have more than one belt traveling on the same slider deck. Belt length is made to suit application and speed can be constant or variable. Made by **Sage Equipment Co.**, 28 Essex St., Buffalo 13, N. Y.

For more details circle NED-5106 on enclosed inquiry slip

DO YOU KNOW? A completely equipped testing laboratory has been set up for experimental stock cutting. Anyone can bring or send sample materials for test cutting to any specified dimensions or fineness. Such machines as thread waste, paper shredding, plastic and rubber, and rag cutters are set up. No charge is made for experimental cutting unless volume amounts to production quantity. Then, only the actual handling charge is made. Service offered by Taylor, Stiles & Co., 7 Bridge St., Riegelsville, N. J.

For more details circle NED-5107 on enclosed inquiry slip

BLUE HERON TRUCK CRANE SAVES



Time Money Labor

ONE MAN can handle up to ONE TON—EASILY and SAFELY!—with a BLUE HERON TRUCK CRANE. Crane swivels through full circle; one man can lift from socket, leaving truck body clear.

Equip ALL company trucks with sockets. Then change cranes from truck to truck.

CHOOSE THE MODEL WHICH FITS YOUR REQUIREMENTS
Model O.C. 30A Cap. 500#
Model O.C. 30B Cap. 1000#
Model O.C. 30C Cap. 2000#

CAM TOOL CO., INC. 11 RANDWICK AVE. OAKLAND 11, CALIF.

For more details circle NED-5108 on enclosed inquiry slip

FAST-ACCURATE...

ANGULAR INSPECTION SET-UPS

SEND FOR CATALOG

Now angular inspection set-ups as accurate as the measuring instruments used can be made in a few moments. Any angle, single or compound, is set up by inserting standard gauge blocks between the Sine-Plate plates. Proper size blocks are indicated for all angles in table supplied. Saves hours of set-up time, guarantees accurate inspection. In two sizes; also magnetic models for machining operations.

OMER E. Robbins COMPANY
Manufacturers of the MAGNA-SINE and Other Precision Tools
5722 TWELFTH ST. • DETROIT 8, MICH.

For more details circle NED-5109 on enclosed inquiry slip

Photo shows plate glass pushed against resilient air-inflated wheel. Note large abrasive contact area—up to 3000% more! This means a corresponding production increase.

. . . how to INCREASE BUFFING, POLISHING PRODUCTION 3000%

● You can boost your buffing and polishing output up to 3000% on flat work . . . and 600 to 700% on contours . . . by using this resilient air-inflated wheel. Many other advantages such as—*no chatter or bounce . . . eliminates under-cuts . . . produces a straight pattern similar to a hand finish.* For use on portable tools or bench-stands—wherever ordinary polishing wheels are used. Send NOW for free literature and name of distributor nearest you. Nu-Matic Grinders, Inc., 8223 Carnegie Ave., Cleveland 3, Ohio.

send for full information TODAY!

NU-MATIC Air-Inflated GRINDERS

For more details circle NED-5110 on enclosed inquiry slip

WHEN THE JOB CALLS FOR BIG PLUS CAPACITY

For a third of a century Shafer ConCaVex Bearings have been demonstrating their unrivaled reserve capacity and dependability in the world's toughest applications. These features tell why: INTEGRAL SELF-ALIGNMENT • FULL RADIAL-THRUST CAPACITY • HIGHEST SHOCK LOAD CAPACITY • EXCLUSIVE MICRO-LOCK ADJUSTMENT • EXCLUSIVE SELF-CENTERING, DIRT-REPELLING "Z" HOUSING SEAL.

Your inquiries will be promptly answered

SHAFER CONCAVEX

SHAFER BEARING CORPORATION
801 Burlington Ave • Downers Grove, Ill.

Industrial and Aircraft Self-Aligning Roller Bearings In All Conventional Types

For more details circle NED-5111 on enclosed inquiry slip

THE new Skinner X5 Solenoid Valve is basically the same as the widely accepted and tested V5, but modified to a construction that is Underwriters' approved for Class I, Group D hazardous locations. Small size and lightweight features are retained, and the X5 is low in price because of the many parts which are interchangeable with other Skinner valves. Rating is 10 watts max.; soft, spring loaded seals prevent leakage; internal parts are stainless steel; wide variety of port locations in 1/8" and 1/4" size; most types available for metering; for AC or DC in a wide range of voltages and frequencies; can be mounted in any position; supplied as two-way normally open or closed, three-way normally open, closed or directional flow. *Write today for details!*

SKINNER ELECTRIC VALVE DIV.
THE SKINNER CHUCK COMPANY
135 Belden Ave., Norwalk, Conn.

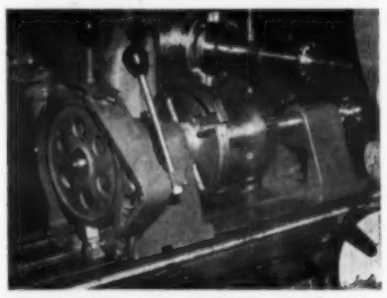
For more details circle NED-5112 on enclosed inquiry slip

COPYING MACHINE
has 46-in. printing width

Engineering drawings, tracings, large size records, balance sheets, charts, statements and reports are among many types of originals which can be reproduced by model 30 Copyflex machine. With a full 46-in. printing width, machine easily handles standard 42-in. roll or cut stock including Copyflex sensitized paper, acetate-coated paper, film and cloth. It's 48-in. 2000-w Vycor mercury arc lamp insures uniform exposure and speeds printing to maximum 12 linear fpm. Connection to 230-v 60 cycle ac power line is all the installation needed. Operator simply feeds in sensitized paper or film with translucent original to be copied. Single control switch turns machine on while another regulates printing speed. Made by **Charles Bruning Co.**, Dept. W, 125 North St., Teterboro, N. J.

For more details circle NED-5115 on enclosed inquiry slip

INDEXING HEAD
usable by unskilled help



Applicable to production and tool room machine tools, Hi-Speed precision index head can be operated by unskilled personnel, as there is no hole counting involved. Spacing is by manipulating two levers against stops. Dividing head will make any division up to 100. It can be used parallel or at right angles to milling machine table, or mounted vertically for drilling or milling anything that is equally spaced. Unit has No. 2 Morse taper spindle and can be furnished with collets, chuck or face plate. Made by **A. C. Willbrand**, Dept. 13, 627 Orwood Pl., Syracuse, N. Y.

For more details circle NED-5116 on enclosed inquiry slip

DO YOU KNOW? "Chucks and Their Uses" is title of practical educational 16-mm sound-color motion picture that is available for showings to industrial groups, engineering and production men, operators and apprentices as well as technical associations. Such subjects as chuck design and operation, horsepower requirements of machine tools, working procedures and chuck selection are covered. Offered for free showings by Skinner Chuck Co., New Britain, Conn.

For more details circle NED-5117 on enclosed inquiry slip

WILLSON PRODUCTS, Inc., 219 Washington St., Reading, Pennsylvania

For more details circle NED-5119 on enclosed inquiry slip

Rotor's 15 New "Multi-power" Chippers are easier to handle . . . do jobs faster

The unique hollow piston and "doughnut" valve of the 15 new Rotor "Multi-power" Chipping Hammers provide the 1-2 punch to cut your chipping costs.

Lighter Weight. These new Rotor Chippers average 1½ to 2 lbs. lighter than other chippers making them easier to handle.

Shorter. Exclusive "doughnut" valve makes possible saving of 1" to 2" in length, making it easier to get into those tough, crowded corners.

Faster Cutting. You get more blows per minute . . . because of new exclusive design.

3 Models in 1. By a simple change of parts you can adapt each of the 5 basic models to serve as 3 hammers to match your job: (1) A "regular" model, (2) A "super-speed" model, (3) A "super-sock" model.

This is the biggest advancement in chipping hammers in the past 15 years! Find out all about it! Write for catalogue No. 37.

AIR O'TOOL

THE ROTOR TOOL CO.
CLEVELAND, OHIO
UNBIASED ANALYSIS OF PORTABLE TOOL PROBLEMS

For more details circle NED-5113 on enclosed inquiry slip

If it has a hole through it YOU CAN HANDLE IT FASTER *with the* SABIN *Coil* TRUCK

A handy truck and a real labor saver in handling Wire Coils, Strip Coils, Wheels, Tires, Lathe Chucks or Face Plates—in fact anything with a hole through it.

You simply run truck up to article, passing arm through hole—then an easy pull back on handle picks up load. Follower wheel minimizes trucking effort.

•

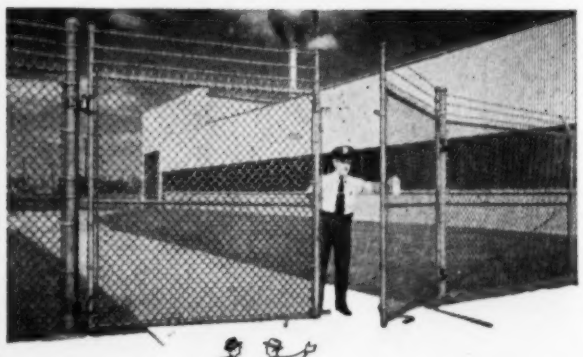
We also manufacture many other types of One Man Trucks. *WRITE FOR BULLETIN NO. 48*, showing complete line.

THE SABIN MACHINE CO.
6536 Carnegie Ave.
CLEVELAND 3, OHIO

For more details circle NED-5114 on enclosed inquiry slip

PAGE FENCE *-Since 1883*

• AMERICA'S FIRST WIRE FENCE •

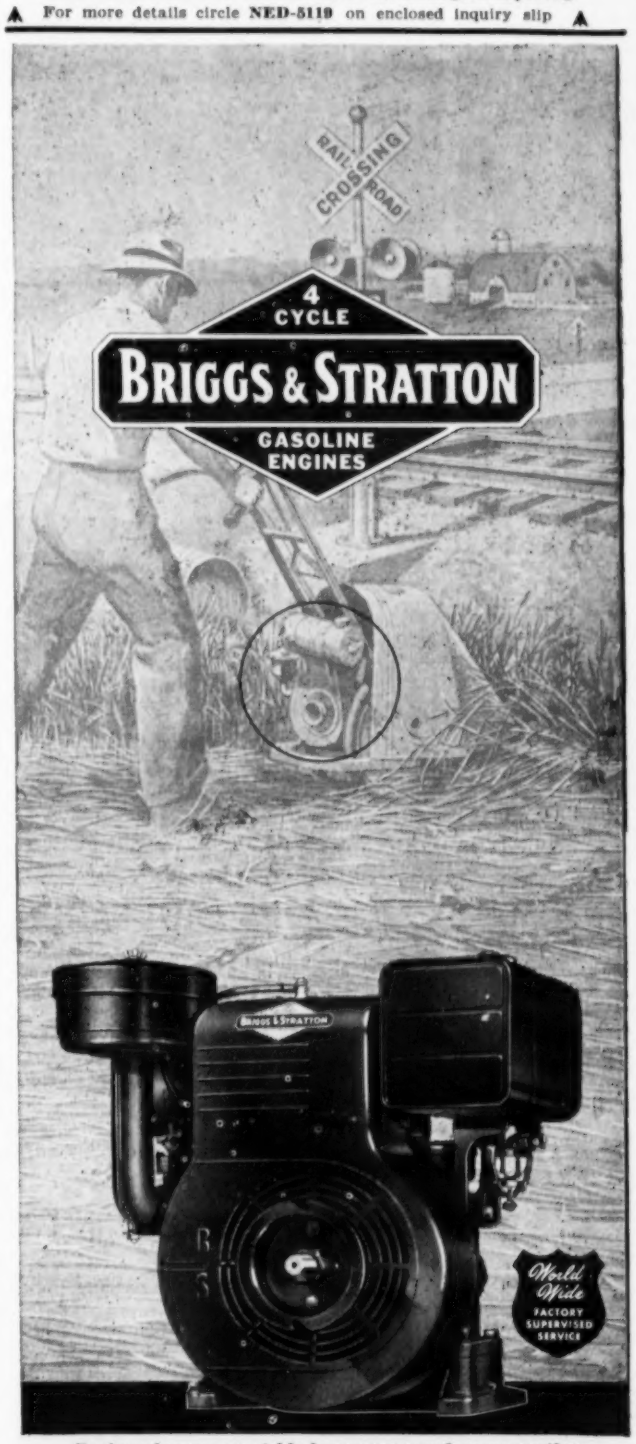


Defense against hazards which could hinder or stop production is a major function of Page Chain Link Fence, guardian of persons and property for more than 60 years. Consult the skilled Page Fence erecting firm near you, whose name we will send with fence data on request. Cost estimates, no obligation. For information:

Write to PAGE FENCE ASSOCIATION in Monessen, Pa., Atlanta, Bridgeport, Chicago, Denver, Detroit, Los Angeles, Philadelphia, New York or San Francisco.

PRODUCT OF PAGE STEEL & WIRE DIVISION OF AMERICAN CHAIN & CABLE COMPANY, INC.

For more details circle NED-5118 on enclosed inquiry slip



Preferred power on sickle-bar mowers and power scythes — the world's most widely used single-cylinder gasoline engines on hundreds of kinds and types of machines, tools, appliances, used by industry, construction, railroads, oil fields, and on equipment for farms and homes.

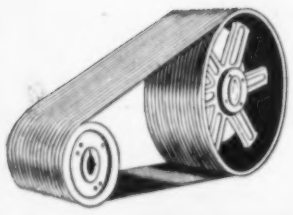
WHEN you want the best in machines, tools, appliances — equipped with the best air-cooled power — you will be sure if they are powered by Briggs & Stratton — the recognized leader in single-cylinder, 4-cycle, air-cooled gasoline engines. Briggs & Stratton Corporation, Milwaukee 1, Wisconsin, U.S.A.

In the automotive field Briggs & Stratton is the recognized leader and world's largest producer of locks, keys and related equipment.

For more details circle NED-5120 on enclosed inquiry slip

CONGRESS SHEAVES and V-BELTS

- Precision built. Soundly engineered. Widely used as original equipment by hundreds of the largest manufacturers of such appliances as washing machines, dryers, laundry equipment and air conditioning installations.
- Congress FHP pulleys are available in attractive 3-color individual boxes, with pulley outside diameter and bore size plainly marked. Simplifies storing-selling.



Immediately Delivery From Stock

WRITE FOR CATALOG

CONGRESS DIAMOND BORED **DRIVES**
3750 E. OUTER DRIVE, DETROIT 34, MICH.

▲ For more details circle **NED-5121** on enclosed inquiry slip ▲

Announcing — *a New and Better* **INFRARED** *Generator*

CHROMALOX *Electric* RADIANT PANELS

Now, more efficient far-infrared comes in convenient pre-engineered panels, reducing oven building to a matter of determining heat requirements and assembling panels to fit the job.

Chromalox Electric Radiant Panels generate more uniformly absorbed far-infrared heat with quick heat-up and reduced oven lengths. Work temperatures to 700° F. are easily obtained with accurate "dialed" control.

It's the far-infrared wave length that makes the difference.

9 WAYS BETTER For Baking, Drying, Curing and other applications.

1. **Longer wave length** absorbed equally fast by all colors.
2. **Shatter-proof construction**—nothing to break and contaminate.
3. **Non-diminishing output** from all-metal Chromalox tubular heat generators.
4. **Uniform heat**—no hot or cold spots.
5. **High intensity radiation**—with more watts per square foot.
6. **Quick heat-up** with energy transformed instantly into heat on the work.
7. **Low-cost oven assembly**
8. **Infinitely variable output**—from 0 to 100% of capacity.
9. **Additionally safe** for any work involving volatiles.

***Now*—OVEN BUILDING SIMPLE AS** A B C

It's easy to build ovens of any desired height and length with Chromalox Electric Radiant Panels. Panels come in 1 x 4 ft. and 2 x 4 ft. sizes, ready to erect and connect. Chromalox on-the-spot engineering assistance to help determine your needs is yours without obligation.

Get this Bulletin

It contains complete information, specifications and application ideas for the use of Chromalox Radiant Panels. Write for your copy today.

Radiant Heating Division: EDWIN L. WIEGAND CO.
7509 Thomas Blvd., Pittsburgh 8, Pa.

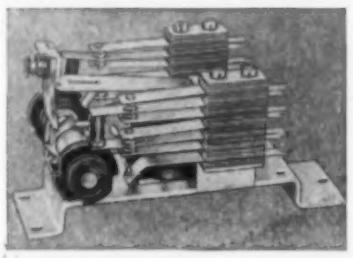
See other advertisements on pages 4 and 83

CHROMALOX IB-28

ELECTRIC HEAT FOR MODERN INDUSTRY

▲ For more details circle **NED-5122** on enclosed inquiry slip ▲

RATCHET-TYPE IMPULSE RELAY
contacts transfer in 20 milliseconds



Positive, precise action on each impulse, regardless of operating speed, is assured with ratchet-type AP impulse relay which has automatic stop to prevent slippage or overtravel of ratchet. Contact transfer time can be as short as 20 milliseconds. Relays are available for up to 230-v ac or dc and with contact combinations up to 4-pole double throw (4 Form C). Contacts are 3/16-in. diameter fine silver, rated at 5 amp on 115-v ac noninductive load. Coils are random wound on molded Bakelite bobbins, and minimum breakdown is 500 v rms to core and frame. Tin-dipped solder terminals are standard. Bakelite panel with screw terminals can also be provided and mounted either horizontally or vertically for easy access. Balanced armature allows mounting in any position. Made by **Potter & Brumfield,** 270 N. Main St., Princeton, Ind.

▲ For more details circle **NED-5123** on enclosed inquiry slip ▲

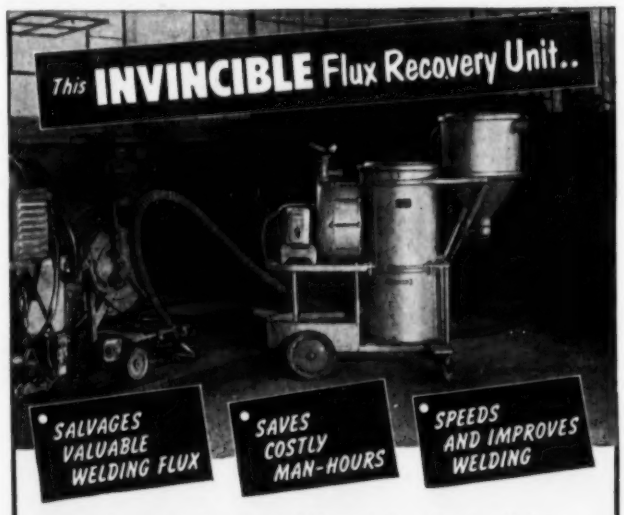
WELDING HELMET
dual windows give "bifocal" effect

Twin windows in this welding helmet permit clear lens view of completed weld and exact location of electrode prior to striking the arc. At the same time operator can bring the dark window into use by merely tilting his head. Readily adjusted to any head size, helmet protects user's face and neck and keeps out harmful rays from other nearby welding operations. Both hands of operator are available for welding operations at all times. Made by **Jacobs Wind Electric Co.,** Dept. D, 2111 Washington Ave. N., Minneapolis 11, Minn.

▲ For more details circle **NED-5124** on enclosed inquiry slip ▲

DO YOU KNOW? Furniture finished with BO 535 clear synthetic will withstand boiling water, alcohol, perfume or even nail polish remover. This low-bake finish has coverage of 235 sq ft per gal and offers good mar resistance, toughness and cold check resistance. Developed by United Lacquer Mfg. Co., 1005 W. Elizabeth Ave., Linden, N. J.

▲ For more details circle **NED-5125** on enclosed inquiry slip ▲

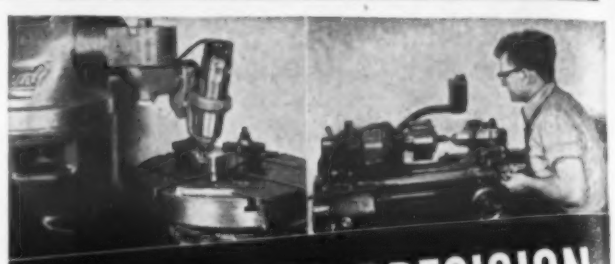


On submerged arc welding jobs, Invincibles recover all loose flux from the work, remove slag or fused particles, and return the unfused flux to the hopper of the welder. Invincibles do the job *automatically*—far more rapidly and efficiently than manual methods. Also by removing all fine dust (flux flour), Invincibles reduce welding rejects and speed production.

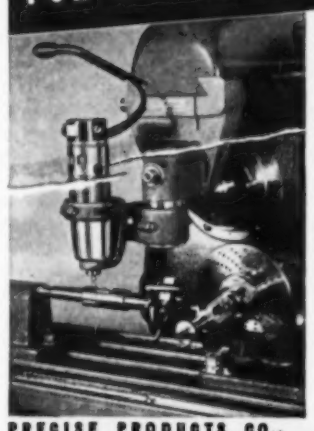
Write for FREE folder on Welding Flux Recovery Systems

INVINCIBLE VACUUM CLEANER MFG. CO.
DOVER, OHIO

▲ For more details circle **NED-5126** on enclosed inquiry slip ▲



LOWEST COST PRECISION
FOR TOOL ROOM AND PRODUCTION



ONE PORTABLE MULTI-PURPOSE PRECISE GRINDER-MILLER WITH MACHINE TOOL MOUNT DOES THE WORK OF A SINGLE-PURPOSE MACHINE COSTING 100 TIMES AS MUCH!

Little can be done today to reduce labor and material costs. For substantial savings employ new, better techniques. Mount PRECISE Grinder-Millers on lathes, drill presses, milling machines and other machine tools or use in special production set-ups. ¼ HP; speeds from 20,000 to 45,000 r.p.m.; 115 volts AC-DC. Ruggedly built for continuous duty. All metal housing; rigid PRECISE quill; sealed micro-precision bearings. *High speeds and accurate PRECISE quill and chuck are ideal for tungsten carbide cutters.* PRECISE will grind, mill or finish any material from soft wood to the hardest alloy steel.

Write FOR CATALOG

PRECISE PRODUCTS CO., 1346 Clark St., Racine, Wis.

PRECISE GRINDER-MILLERS

▲ For more details circle **NED-5127** on enclosed inquiry slip ▲

just SAW that's all!

WITH THE **KETT** PANEL CUTTING SAW

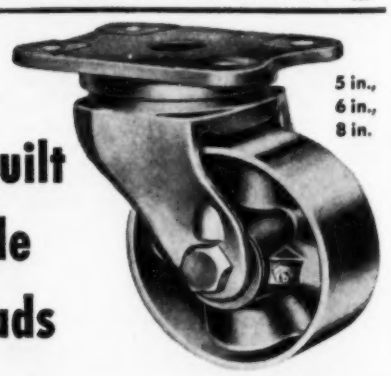
- SAVE TIME---SAVE MONEY
- NO DRILLING---NO FILING---NO DEBURRING

Just "plunge" right in and cut . . . everything from cardboard to steel. Follow curves or contours . . . zip through the toughest cutting jobs quicker and easier. Typical capacities: 12 ga. steel, 3/16 in. aluminum, ¼ in. masonite, plywood, Amor Ply, and plastics. Interchangeable heads permit capacities up to ½ in. in soft rigid materials. A variety of blades for hard tempered or soft aluminum, copper, brass, lead, cast iron, etc., are available. Your present electric or pneumatic drill motor may be used for the power unit. Write for Catalog E-6 showing time-saving KETT tools.

The KETT TOOL COMPANY
5 East Third St., Cincinnati 2, Ohio

▲ For more details circle **NED-5128** on enclosed inquiry slip ▲

Specially built to handle heavy loads



You can give hard, heavy use to Bassick "HA" Heavy-Duty Casters because they're built to take it.

Forged steel top and horn plates, unit-type heavy duty main load bearing, make this caster practically indestructible. The only limit on load capacity is the ability to move a given load on a 5 in., 6 in. or 8 in. wheel.

Put the Bassick "HA" to work *now* to reduce the "Reducible 30%" (materials-handling . . . about 30% of total cost . . . one of today's few *reducible* expenses). Write for Bulletin HA to the world's largest manufacturer of casters . . . THE BASSICK COMPANY, Bridgeport 2, Conn. *In Canada:* Belleville, Ont.

Bassick A DIVISION OF STEWART SW WARNER

MAKING MORE KINDS OF CASTERS . . . MAKING CASTERS DO MORE

▲ For more details circle **NED-5129** on enclosed inquiry slip ▲

RYNEL GEARS in Fine Pitches

Specialists in
NAVIGATION
COMMUNICATION
AIRCRAFT
ELECTRONIC
Gear Requirements

Complete Facilities For
Design Engineering
High Volume Supply
Bar Stock To Finished Gears
Precision Inspection

RYNEL ENGINEERS can be in your plant the same day you call
Send Blueprints for Quotation, or Telephone for Consultation
Telephone Sterling 4440

RYNEL CORPORATION 302 MILLER STREET • STERLING, ILLINOIS

SPUR • HELICAL • WORM • WORM GEAR • INTERNAL SEGMENT • SPROCKET • RATCHET • STRAIGHT BEVEL GEARS

▲ For more details circle NED-5130 on enclosed inquiry slip ▲

Economy ELEVATING Table

ELEVATING TABLE EXTENDED

For feeding sheet stock, supporting fabricated frames, handling heavy dies, or as a portable work bench. All four sides are accessible to the user.

Lifting and lowering load is hand operated. Crank handle can be attached and operated from either end, with two speed lifting. Self locking worm and screw elevating mechanism holds work at any height without danger of falling. A foot operated floor lock holds table stationery when in use.

Capacity of 2,000 lbs. Dimensions—top 24" x 36", min. height 24", max. height 42".

PRICE F.O.B. CHICAGO $210.80

ECONOMY ENGINEERING CO.
4519 W. Lake St.,
Chicago 24, Ill.

▲ For more details circle NED-5131 on enclosed inquiry slip ▲

an ACCO product

Speed that Load!

• Save effort, speed material handling with the completely modern WRIGHT *Speedway* Hoist for hook, lug, or trolley suspension.

The *Speedway* has long life, requires little maintenance. It has alloy steel gears, self-lubricating ball and roller bearings, preformed cable, grooved drum, weatherproof wire conduits, silver contact controls, plus other features.

See your distributor today or write us for literature.

WRIGHT Hoists Trolleys Cranes

ACCO
WRIGHT HOIST DIVISION
AMERICAN CHAIN & CABLE
York, Pa., Chicago, Denver, Detroit, New York, Philadelphia, Pittsburgh, San Francisco, Bridgeport, Conn.

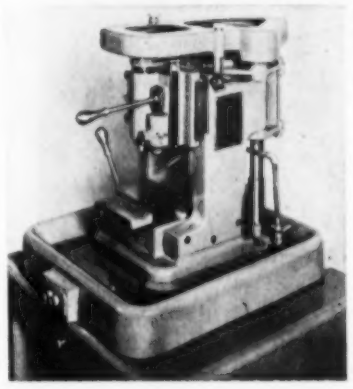
▲ For more details circle NED-5132 on enclosed inquiry slip ▲

PORTABLE AIR COMPRESSORS sizes deliver 21, 35, or 50 cfm

The three portable air compressors available mounted on a trailer with standard hitch for towing behind car or truck, or with skid mountings, can deliver 21, 35 or 50 cfm of air. Compressors are of V-type, four-cylinder, two-stage units and are driven by heavy duty air-cooled gasoline engines. Either electric or magneto engine starting systems are available. Two larger compressors have governors which slow down the engine while compressor is unloading. Chassis of units also serves as a tank and is equipped with a drain. Compressor features include: automatic oiling to all parts, finned heads, cylinders and inter and after coolers, forged steel crankshaft and automatic unloaders. The 35 and 50 cfm compressors are available with an enclosure for protection against weather and tampering. Made by **DeVilbiss Co.**, 301 Phillips Ave., Toledo 1. O.

▲ For more details circle NED-5133 on enclosed inquiry slip ▲

PROFILING MACHINE has eight spindle speeds



Made for bench mounting, with pedestal metal cabinet optional, redesigned precision profiler with V-belt drive has new cutter holder collets with improved grip. The same collet is used in the follower spindle, parallel with main spindle. Heavier, compact machine can perform profiling, milling, slotting, recessing and routing operation on small parts. Machine requires floor space of 24 x 26 in. Standard 1750 rpm, ⅓ hp, three-phase motor gives eight spindle speeds from 437 to 7000 rpm. A 3450 rpm motor offers eight speeds from 875 to 14,000 rpm. Working area is 2 x 4 in. horizontal, 1¼ in. vertical. Made by **Wade Tool Co.**, 39 River St., Waltham, Mass.

▲ For more details circle NED-5134 on enclosed inquiry slip ▲

DO YOU KNOW? Steel tubing that has become flattened during bending operations can be resized easily with a series of elongated steel balls and a length of cable. Cable and balls are pulled through distorted tubing with a hydraulic cable testing machine. This method was developed by Texas Engineering & Mfg. Co., P. O. Box 6191, Dallas, Tex.

▲ For more details circle NED-5135 on enclosed inquiry slip ▲

NEW FRACTIONAL to 20 G.P.M. POLYETHYLENE PUMPS

WITH NATURAL RUBBER, GUM, NEOPRENE, BUNA, HYCAR
"flex-i-liners"

ESPECIALLY DESIGNED TO HANDLE HCl, HF, NaOH, H_2SO_4 DISTILLED H_2O, $FeCl_3$, $Ca(OH)_2$ and many others

Fluid only contacts outer surface of "FLEX-I-LINER" and inner surface of body block. 35 combinations of rubber and plastic "flex-i-liners" and pump body blocks. Models available from fractional to 20 G.P.M., Vinyl and Compar "flex-i-liners" also available in pumps to 5 G.P.M. capacities. Widely used in chemical, food, pharmaceutical and other process industries—wherever non-contaminating pumping is required. Excellent for slurries. Write for literature.

FLUID NEVER TOUCHES METAL
NO STUFFING BOXES
NO GASKETS
NO VALVES
SELF LUBRICATING

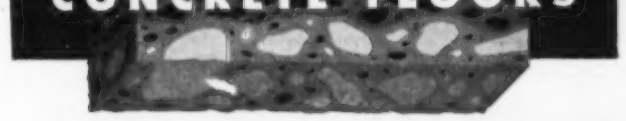
VANTON PUMP CORP.
EMPIRE STATE BLDG., Dept. NE-6, New York, N. Y.

VANTON NON CORROSIVE CONTAMINATING flex-i-liner PUMPS

▲ For more details circle NED-5136 on enclosed inquiry slip ▲

NOW! A NEW CONCEPT IN CONCRETE FLOORS.. YEARS AHEAD

DYNAPAKT CONCRETE FLOORS



The Dynapakt system is years ahead providing the best concrete floors that can be obtained. Used for topping new or old floor bases, Dynapakt is concrete at its modern best. Users benefit from the high strength floors that have never been achieved before!

GET THE COMPLETE FACTS. WRITE FOR THE NEW ILLUSTRATED BROCHURE..."TRAFFIC CONCRETE, A STUDY IN SPECIALIZATION".

FLASH-STONE COMPANY, Inc.
3723 PULASKI AVENUE, PHILADELPHIA 40, PENNA
specialists in industrial floor installations . . . nationally

▲ For more details circle NED-5137 on enclosed inquiry slip ▲

- Retain properties from —110° to +500° F.
- Resist weathering, moisture, oxidation, ozone
- Withstand many chemicals and lubricating oils
- Will not turn to carbon despite heat

STALWART silicone rubber parts assure dependable operation under severe service conditions. They retain their desirable physical, chemical and dielectric properties over a 600°F. temperature range.

Parts fabricated from silicone stocks are resistant to permanent compression, prolonged weathering, ozone, ultra-violet light, chlorinated hydrocarbons, lubricating oils and many chemicals.

STALWART is prepared to mold, extrude, punch, lathe-cut and mandrel-build precision silicone rubber parts to meet individual, S.A.E. and A.S.T.M. specifications.

SILICONE RUBBER STOCKS

Compound Number	Hardness Shore A Durom	Tensile Strength (p.s.i.) Avg.	Tensile Strength (p.s.i.) Min.	Elongation per cent Avg.	Elongation per cent Min.	Temperature Range (°F) Low	Temperature Range (°F) High	Compression Set % at 302° F.	Dielectric Strength volts/mil	Color After Curing
*Silastic 150	45 to 55	360	>250	250	>200	<−70	+500	40 to 60	500	White
160	55 to 65	490	>400	180	>150	<−70	+500	50 to 70	500	White
180	75 to 85	700	>575	85	>60	−90	+500	70 to 90	650	White
181	75 to 85	670	>550	85	>60	−80	+500	60 to 90	800	Gray
6-181	75 to 85	600	>500	65	>50	<−110	+500	40 to 60	800	Gray
250	40 to 55	650	>550	300	>250	<−110	+500	40 to 60	800	Orange-tan
**G-E 81223	40±5		800		400	−85	+520	65 to 75	480	?
**G-E 81271	50±5		800		250	−85	+520	65 to 75		?

399-SR Write today for Catalog No. 51SR-1.

STALWART RUBBER COMPANY
200 Northfield Road • Bedford, Ohio

▲ For more details circle NED-5138 on enclosed inquiry slip ▲

BAKER TRUCKS require LESS MAINTENANCE

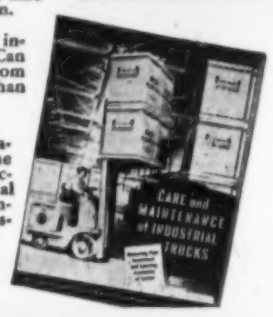
to you this means
- LESS TIME OUT OF SERVICE
- TOP OPERATING EFFICIENCY
- LOWER OVERALL COST

Baker Trucks are built to give maximum trouble-free service, and designed for easier preventive maintenance and less costly repairs.

Electric dynamic braking saves wear on brake linings and protects truck parts. Service brakes can be adjusted in 5 min., and relined in 30 min.

Power Axle has fewer moving parts and is less subject to wear. Mast assembly can be removed in 20 min. and power axle pulled in 40 min.

Trailing Axle is the simplest in use on industrial trucks. Can be removed from truck in less than 20 minutes.



These 3 illustrations are from the new 16-page picture-story manual "Care and Maintenance of Industrial Trucks." Write for your copy today.

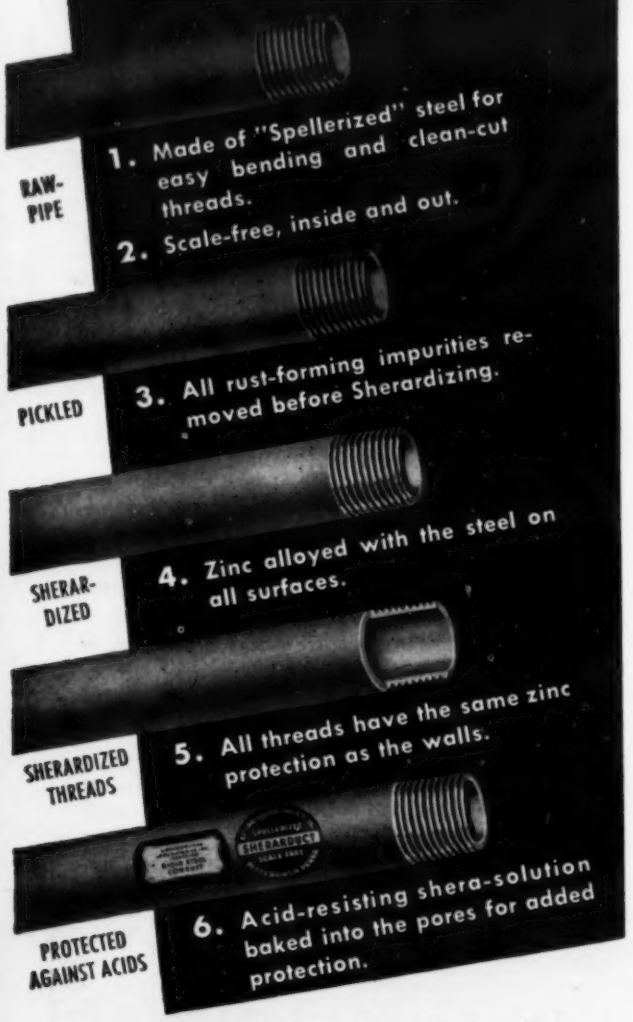
BAKER INDUSTRIAL TRUCK DIVISION *of The Baker-Raulang Company*
1245 West 80th Street, Cleveland 2, Ohio

Baker INDUSTRIAL TRUCKS

▲ For more details circle NED-5139 on enclosed inquiry slip ▲

6 REASONS WHY

SHERARDUCT
RIGID STEEL
CONDUIT
is better



Write for our catalog. National Electric Products Corp.
1353 Chamber of Commerce Building, Pittsburgh 19, Pa.

National Electric Products

EVERYTHING IN WIRING POINTS TO

PLANTS IN
AMBRIDGE, PA. • TORRANCE, CALIF.
ELIZABETH, N. J.

▲ For more details circle NED-5140 on enclosed inquiry slip ▲

RHEOSTATS
now available from stock

Formerly made only to order, line of four wire-wound, vitreous enamel rheostats are now stocked for immediate delivery. Models included are: G, 75 w; P, 225 w; T, 750 w; and U, 1000 w. Two largest sizes are shown. All are finished in resistance value ranges of 0.5 to 10,000 ohms for model G and 1 to 2500 ohms for models P, T and U. Made by **Ohmite Mfg. Co.**, 4843 W. Flournoy St., Chicago 44, Ill.

▲ For more details circle NED-5141 on enclosed inquiry slip ▲

ASBESTOS SIDING NAILS
used with nonlumber sheathing

Asbestos siding can be easily, securely and inexpensively fastened to nonlumber sheathing by Twist Nails, made of special alloy and having needle point heads. They are driven in the usual manner and protrude about 1 in. on the inside. They are then twisted by the Twister tool that looks like a slotted screwdriver and which gives the nails a figure "4" clinch, with the crossbar of the "4" pressed solidly against the sheathing. Nails are supplied in place of face nails when used in this type of installation and are suitable only for new construction where clinching can be performed before inside walls are in place. Made by **Ruberoid Co.**, 502 Fifth Ave., New York 18, N. Y.

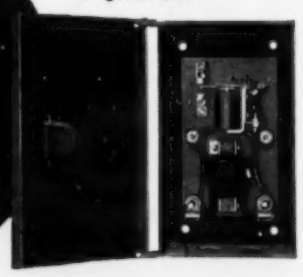
▲ For more details circle NED-5142 on enclosed inquiry slip ▲

DO YOU KNOW? "Johnson Makes the Team" is the title of a 32-page illustrated "Comic" or cartoon booklet that tells and sells the story of American competitive enterprise. Actually, it's a case history of the growth and development of B. F. Goodrich Co. It is designed as a free teaching aid for upper grades in high schools. Sample copies of the booklets and teaching manuals are available from B. F. Goodrich Co., Dept. E, 500 S. Main St., Akron 18, O.

▲ For more details circle NED-5143 on enclosed inquiry slip ▲

NEW
A-C WIDE RANGE CURRENT
RELAY
IS REACTOR TYPE, CHATTER-FREE

• A LOAD-SENSING DEVICE for safety or protection purposes in control, power generation



Bulletin 403 describes Ward Leonard's new reactor type relay for a-c circuits where currents are subject to wide variations. Current ratios up to 50 to 1 are standard, 200 to 1 on special order.

A saturable reactor is connected in parallel with a sensitive relay coil. The relay remains closed throughout specified current range—opens only when load current falls below minimum or when disconnected from reactor.

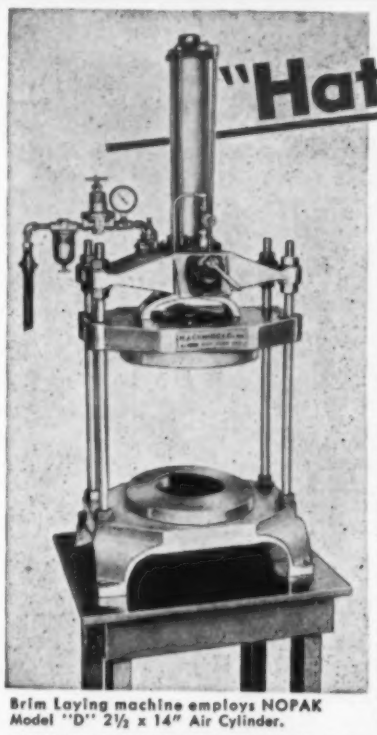
Silver-to-silver SPDT contacts assure positive make and break.

Write for relay Bulletin 403. WARD LEONARD ELECTRIC CO., 51 South Street, Mount Vernon, N. Y. Offices in principal cities of U.S. and Canada.

WARD LEONARD ELECTRIC CO.
Result-Engineered Controls Since 1892
RESISTORS • RHEOSTATS • RELAYS • CONTROL DEVICES

▲ For more details circle NED-5144 on enclosed inquiry slip ▲

"Hat Press"
Operated by
NOPAK CYLINDER



Brim Laying machine employs NOPAK Model "D" 2½ x 14" Air Cylinder.

The Cuming Pneumatic Brim Laying and Flanging Machine is used by leading makers of felt and straw hats to "set off" brims . . . formerly a laborious and highly skilled hand operation.

Controlled and cushioned NOPAK Cylinder Power results in faster closing, a shorter work cycle, constant and uniform pressure. This application may suggest similar uses for NOPAK Cylinders in the machines you build for others, or use in your own plant.

GALLAND-HENNING MFG. CO., 2755 S. 31st Street, Milwaukee 46, Wis.

Write for Bulletin SW-1 or refer to Sweet's File for Product Designers.

Representatives in Principal Cities

NOPAK VALVES AND CYLINDERS
DESIGNED for AIR and HYDRAULIC SERVICE

▲ For more details circle NED-5145 on enclosed inquiry slip ▲

"Costs cut, output tripled with Irvington No. 123 Varnish" HANOVIA Chem. & Mfg. Co.

"We've improved the quality and cut the production cost of our transformers by impregnating the *entire transformer* with IRVINGTON No. 123 Internal Curing Varnish." That's the statement made by Mr. N. J. Frizen, Plant Manager of Hanovia Chemical and Manufacturing Co., the world's largest producer of ultraviolet equipment for industry and the medical profession.

Other advantages of No. 123: thorough cure. Excellent flexibility and oilproofness. Firm adherence to underlying surface. Long life at temperatures up to 130° C.

Get the full story—write for technical data sheet.

LOOK TO IRVINGTON FOR INSULATION LEADERSHIP
IRVINGTON
VARNISH & INSULATOR COMPANY
14 ARGYLE TERRACE, IRVINGTON 11, NEW JERSEY
Plants: Irvington, New Jersey; El Monte, California; Hamilton, Ont., Canada

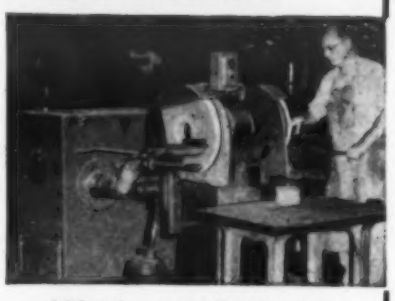
▲ For more details circle NED-5146 on enclosed inquiry slip ▲

an ACCO product
ACCO Registered DUALOC SLINGS

▲ For more details circle NED-5147 on enclosed inquiry slip ▲

STOP DUST

Instantly with DUSTKOP



DUSTKOP ▶ 1400 cfm

▼ DUSTKOP 3600 cfm

300 cfm to 10,000 cfm per unit (22 models).

Standard, pre-tested, available from stock. Ask for catalog 605-2. Describe dust problem for recommendation by return mail. No obligation.

AGET-DETROIT CO.
201 Main St.
Ann Arbor, Mich.

▲ For more details circle **NED-5148** on enclosed inquiry slip ▲

VERSAVEYOR

LOW-PRICED*. A 13-ft. unit without either undercarriage $343; add $80 for wheel undercarriage, $93 for caster undercarriage. (See photo below.)

LIGHT-WEIGHT. Whether it's a 13, 15, 17 or 19-ft. length, the Versaveyor is easy to handle 'most anywhere. For example, the 13-ft. unit without undercarriages weighs only 150 lbs.

EASY-TO-HANDLE. From a horizontal low of 22 in. to a height at either end of 9 to 14 ft. (45-degree angle), the Versaveyor is safe and stable. Unit load, 150 lbs.; distributed load, 300 lbs.

WELL-BUILT. Box-type frame; heat-treated aluminum alloy.

MANY USES. Out of box cars to gravity conveyors. Into trucks. Up to second floors. Flat on stairways. Will pass through 30-in.-wide door with undercarriages attached. Has 12-in.-wide belt.

*Prices f.o.b. Orient

WRITE FOR LITERATURE ON THIS AND OTHER BELT CONVEYOR EQUIPMENT!

BELT THE BELT CORPORATION
7402 STAHL ROAD ORIENT, OHIO

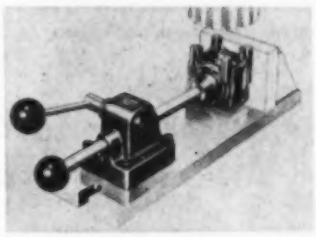
▲ For more details circle **NED-5149** on enclosed inquiry slip ▲

SELF-PUNCHING CLINCH NUT also stakes or clinches itself

This line of type H clinch nuts is designed for use with illustrated Richards Bros. tooling. Single stroke of press causes nut to punch its own hole and simultaneously stake or clinch itself in metal. Nuts can be fed automatically to interchangeable magnetic punches for production operations. Sizes range from No. 6-32 to ⅜-24 to fit various thicknesses of metal. Full engineering service is offered to adapt this fastening technique for production operations. Made by **Kean Mfg. Co.**, 23850 Kean Ave., Dearborn, Mich.

▲ For more details circle **NED-5150** on enclosed inquiry slip ▲

FIXTURE LOCKING DEVICE can exert 1500 lb holding pressure



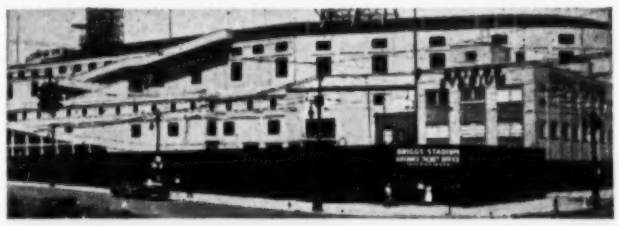
A simple push or pull on bar knob of screwless, quick-acting Grip-Master locking device for jigs and fixtures, sets the device at any position between fully open or closed. Light press on locking lever gives extra forward motion to bar for exerting holding pressure up to 1500 lb. Fixture lock is adaptable to wide range of machining and assembling operations using metal, wood or plastic stocks. Long stroke provides wide work clearance. One-inch portion of end of bar is soft to allow machining for specific jobs. Made by **National Machine Tool Co.**, Dept. 272, Racine, Wis.

▲ For more details circle **NED-5151** on enclosed inquiry slip ▲

COPYING LATHE requires low setup, changeover time

Location of the template on the front of model GF copying lathe facilitates change-over or adjustment and places it in full view of operator. Used for contour turning and internal copying, lathe is simple in operation, requires low setup and changeover time, reduces handling and checking time and eliminates expensive form tools and multitool blocks. Chips are removed through the rear of machine without interrupting production. Entire hydraulic system is enclosed in the carriage. Copying range is increased through use of a duplex tool holder. Developed by George Fischer Ltd. of Switzerland, machine is made and sold in this country by **New Britain Machine Co.**, Dept. A, New Britain, Conn.

▲ For more details circle **NED-5152** on enclosed inquiry slip ▲



A SHUTOUT .... that saved Briggs Stadium from loss by moisture damage

AN IMPORTANT SHUTOUT was scored for Briggs Stadium—home of the Detroit Tigers Baseball Club—by the TREMCO MAN. Water infiltration had already caused concrete spalling, cracked and crazed walls and rusting of reinforcing rods. Considering existing conditions and desired appearance, Tremco 101 Mastic was selected to protect, preserve and beautify.

END TO MOISTURE TROUBLES. Quickly applied by brush and spray, Tremco 101 Mastic forms an elastic impervious coating. It becomes a seamless seal that expands and contracts with temperature changes—completely shutting out driving rain. Applied over brick, concrete, stucco, stone and other surfaces, Tremco 101 Mastic does not become brittle, peel, crack or sag.

PROTECTS, PRESERVES AND BEAUTIFIES. Furnished in a selection of colors, Tremco 101 Mastic both beautifies and seals in one application and lasts for years. *The Tremco Man* has experience in sound techniques for low-cost prevention of moisture infiltration. He is qualified to recommend the best material and method to cut maintenance of your buildings. Call or write. No obligation. The Tremco Manufacturing Company, Cleveland, Ohio or The Tremco Manufacturing Company (Canada) Ltd., Toronto.

UM-1018

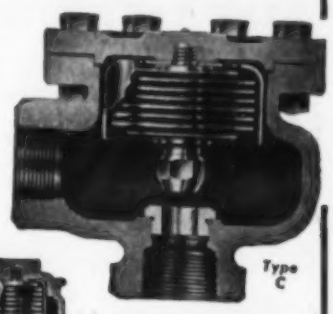
TREMCO THE TREMCO MANUFACTURING CO. CLEVELAND, OHIO

▲ For more details circle **NED-5153** on enclosed inquiry slip ▲

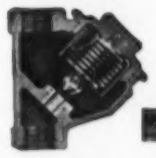
Varying Operating Temperatures Ended

with NICHOLSON STEAM TRAPS

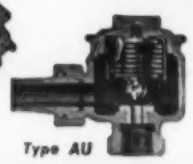
The unusual effectiveness of Nicholson traps in discharging air as well as condensate was again proved recently by a large maker of molded products. Costly temperature fluctuation of the presses was eliminated by Nicholsons. Also widely used for such critical applications as jacketed kettles. 5 types; for process, heat, power; sizes ¼" to 2"; press. to 250 lbs.



Type C



Type AHV



Type AU

BULLETIN 152
162 Oregon St.
Wilkes-Barre, Pa.

W. H. NICHOLSON & CO.
TRAPS · VALVES · FLOATS

▲ For more details circle **NED-5154** on enclosed inquiry slip ▲

SHOCK ABSORBERS for Electrical Assemblies

THOMPSON shock absorbers provide shockproof mounting and long service life for lighting fixtures, meters, fans, unit heaters, motors, instrument panels, process controls, etc. These durable spring-loaded units permit angular as well as vertical movement to assure maximum vibration absorption.

Utilizing threaded connections for ease of installation, **THOMPSON** shock absorbers have only four component parts: malleable cast iron bell-shaped body, open spring plate, stem, and a powerful steel spring. All parts are treated for corrosion resistance. In addition, unit's design prevents damage to conductor wires and assures complete safety in event of spring failure.

Light and heavy-duty models are available in range of sizes to support loads up to 80 pounds.

FOR COMPLETE DATA, WRITE TODAY FOR CATALOG NO. 50

811-TE

THE THOMPSON ELECTRIC CO.
1138 Power Avenue • Cleveland 14, Ohio

▲ For more details circle **NED-5155** on enclosed inquiry slip ▲

LOOK HERE!

FOR FASTENINGS THAT RESIST CORROSION

Here's a *bookful* of ready answers to your corrosion problems . . . the handy 56-page Harper Stock Book and Price List. It gives you information on all Harper Everlasting Fastenings—bolts, screws, nuts, washers, rivets and accessories in brass, bronze, copper, aluminum, stainless, Monel and other alloys—all products of America's leading manufacturer specializing in corrosion-resistant fastenings. Over 7000 items in stock and ready for delivery from warehouses and distributors, coast to coast!

This coupon will bring your copy!

HARPER
EVERLASTING FASTENINGS

SPECIALISTS IN ALL NON-CORROSIVE METALS

The H. M. Harper Co.
8212 Lehigh Ave., Morton Grove, Ill.
Rush my copy of the Harper catalog.

Name.....
Company.....
Position.....
Address.....
City.....*Zone*....*State*.....

▲ For more details circle **NED-5156** on enclosed inquiry slip ▲

THE TACKER IT PAYS TO USE!

SAVES

TIME in all types of tacking and fastening. Fast, easy one-hand operation. Take-up Jaw speeds results and permits instant inspection and on-the-job service. Quick assembly and disassembly without tools.

STEPS. Self-contained. Ready for instant, continual use. Staple supply as near as vest pocket with Hansen Vest-Kit—for quick refills. No back-tracking.

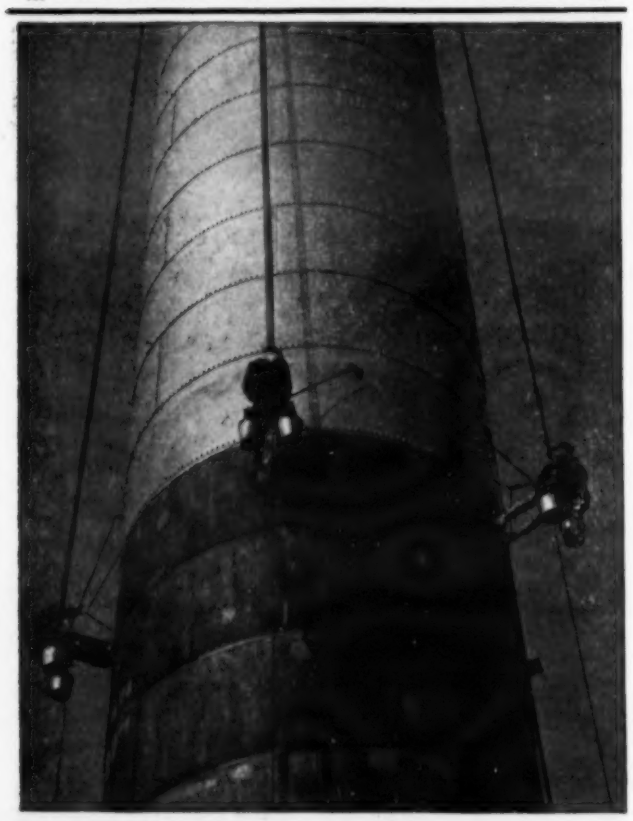
MATERIALS. Precision, accurate driving due to balanced design assures economical and efficient use of all materials.

36 MODELS — 80 STAPLE SIZES

REQUEST BOOKLET

A.L.HANSEN MFG. CO.
5164 RAVENSWOOD AVE. CHICAGO 40 ILLINOIS

▲ For more details circle NED-5157 on enclosed inquiry slip ▲



DON'T RISK PAINT FAILURE

New, free book brings industrial painting facts up to date. We don't make paint. But to help you get full value from the paint you buy, we'll send you this fact-packed book on aluminum paints. Read it before you plan another paint job. It can save you time and dollars.

You may know that aluminum paint is best for many places in your plant. But do you know what *kind* of aluminum paint is best for each job? Some are specially formulated for painting metal and masonry, others for wood, others for heated surfaces. Mail the coupon for the free book that answers these and hundreds of other paint questions.

SEND FOR FREE BOOK

ALUMINUM COMPANY OF AMERICA,
Paint Service Bureau, 1788-F Gulf Bldg., Pittsburgh 19, Pennsylvania.

Please rush me free copy of "Painting with Aluminum."

Name (please print)_____
Address_____
City_____ State_____
We plan to paint the following_____

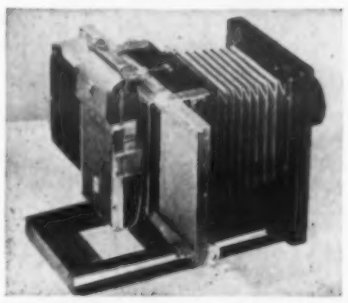
Look for this shield on aluminum paints made by many paint manufacturers using ALCOA PIGMENTS.

ALCOA ALUMINUM

ALBRON ®

▲ For more details circle NED-5158 on enclosed inquiry slip ▲

PICTURE DEVELOPING BACK
for commercial view cameras



Industrial photographers can now make finished shots quickly using their own 5 x 7-in. or 8 x 10-in. commercial view cameras together with the Polaroid Land Back. The Land back is atachment consisting of the film holder with built-in developer which mounts on back of commercial camera. Finished prints are produced 1 minute after picture is taken. Industrial or scientific photographic work is thus speeded up by elimination of conventional developing process. Offered by **Burke & James, Inc.,** 311 S. Wabash Ave., Chicago 4, Ill.

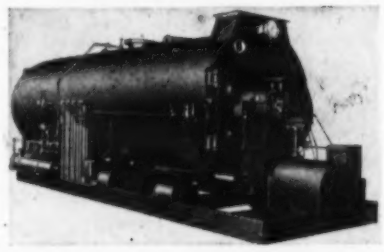
▲ For more details circle NED-5159 on enclosed inquiry slip ▲

PRESSURE SWITCH
can be air or hydraulically actuated

Air, aircraft fuels, hydraulic fluids or lubricating oils are among agents which will actuate this pressure switch of the bourdon tube type for control or warning purposes. Pressures in ranges from 0 to 1500 psi can be handled. Ambient operating limits include temperature range from −65 to 160° F and operation at altitudes from sea level to 50,000 ft. Maximum current capacity is 1 amp at 50,000 ft at 28 v dc. Made by **Hydro-Aire, Inc.,** Dept. NED, 3000 Winona St., Burbank, Calif.

▲ For more details circle NED-5160 on enclosed inquiry slip ▲

STEAM GENERATOR
capacities range from 18 to 500 hp

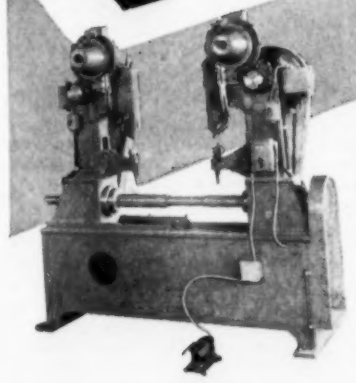


Utilizing principle of Cyclonic combustion, Cyclotherm packaged steam generators produce 1 boiler hp for each 3 sq ft of heating surface. Full power operation is possible in 15 to 20 minutes from a cold start. Boilers are designed for oil or gas firing, at operating pressures from 15 to 200 psi and in ratings of 18 to 500 hp. Built in accordance with ASME and National Board standards, these generators bear Underwriters' Laboratories label. Made by **United States Radiator Corp.,** Cyclotherm Div., Dept. NED, Oswego, N. Y.

▲ For more details circle NED-5161 on enclosed inquiry slip ▲

DOUBLE YOUR PRODUCTION WITH DOUBLE RIVITORS!

T-J



● Set two rivets at a time with this new T-J Dual Rivitor! Equipped with 10" hoppers, tooled to automatically feed and set two ¼" dia. x ⅝" long wagon box head rivets at a time in assemblies for farm implements. Controlled by one foot pedal.

T-J Single Rivitors available *electrically* powered for 1/16" to ¼" diam. solid steel rivets up to ⅞" long; *air-powered* for aluminum alloy rivets up to ¼" diam. or steel rivets up to ⅛" diam., up to ¾" long. Throat depth, 8" to 36". Write for bulletins 646 and 847. The Tomkins-Johnson Co., Jackson, Mich.

36 YEARS' EXPERIENCE (T-J)

TOMKINS-JOHNSON
RIVITORS...AIR AND HYDRAULIC CYLINDERS...CUTTERS...CLINCHERS

▲ For more details circle NED-5162 on enclosed inquiry slip ▲

More Ingenuity!

Know-how coupled with ingenuity are the ingredients that make Alvey Conveyors the ultimate solution to your package conveying problems. Be sure to call in an Alvey Engineer. Write and ask for an Alvey expert to cooperate with your technical staff.

ALVEY CONVEYOR MFG. CO.
9259 Olive St. Rd., St. Louis 24, Mo.

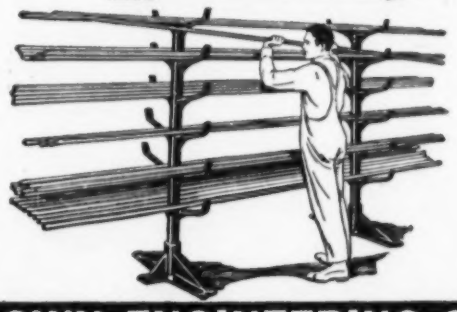
ALVEY

▲ For more details circle NED-5163 on enclosed inquiry slip ▲

SPEEDS UP STOCK-ROOM SERVICE

The BROWN TIME-SAVING RACK saves the time previously lost end-hauling each bar of stock its entire length from the old-style, closed-side Rack, the Brown Rack requiring but a few inches of side movement. Each length, width and thickness of stock is displayed in goldfish visibility for instant selection. Workmen waiting for stock are served without waste of time, and returned to their production machines to turn out a maximum of output. Any time you require additional storage space, all you need do is to add more units. If you want to relocate it at any time, you can do so for it is unattached to the building. It is a simple, durable article made of metal in five styles. It can't burn, warp, sag or twist: depreciation is practically nil. SEND FOR BULLETIN No. 26-D DESCRIBING—

BROWN'S *QUICK-SERVE* RACKS



BROWN ENGINEERING CO.
129 N. THIRD ST. READING, PENNA.
RACKS • VISES • CLUTCHES • COUPLINGS

▲ For more details circle NED-5164 on enclosed inquiry slip ▲

NEW LOW COST VOLUME PRODUCTION

Complete, Full-Size Ammonia-Type

VERSA-LINER WHITEPRINTER $1295

Model D

● Economically prints and develops black line and colored line whiteprints. Uses dry ammonia-fume diazo method. Plugs into standard 115 V 60 cycle AC line, using 19 amps. Easy to install and operate. Handles cut sheets or roll stock up to 42" wide in any length. Variable printing speed to 5 ft. per min. Developing speed set at 6 ft. per min. New light source—low replacement cost. Easy to clean. Minimum maintenance. *Get full facts now!*

Also Model M Versa-Liner for moist diazo process *(no fumes)* at $1095.00 list. Spee-Dee Sheet Printers up to 24" x 36" from $55.12 to $149.81.

PECK & HARVEY 5733 N. WESTERN AVE. CHICAGO 45, ILLINOIS
MFRS. OF WHITEPRINT, BLUEPRINT AND PHOTOCOPY EQUIPMENT

▲ For more details circle NED-5165 on enclosed inquiry slip ▲

HERE'S THE TEAMMATE FOR YOUR LATHE

Get fast, convenient grinding of lathe centers, cutters, reamers, rolls and dies. You can do it with THE CINCINNATI Ball Bearing Tool Post Grinder!

THE CINCINNATI mounts on the compound rest of any lathe with a 9" swing, or larger. It grinds within 2½" of the maximum swing . . . can be swivelled around the clamping bolt . . . spindle height is readily changed. Motor mount is adjustable for easy maintenance of belt tension. Write today! Ask for name of your distributor or Bulletin 52 UD.

THE BEST IN DRILLS, GRINDERS, BUFFERS, PORTABLE TOOLS

TRADE The Cincinnati MARK

ETCO 50th Anniversary

THE CINCINNATI ELECTRICAL TOOL CO.
Division of THE R. K. LeBLOND MACHINE TOOL CO.
CINCINNATI 8, OHIO

For more details circle NED-5166 on enclosed inquiry slip

WATSON-STILLMAN
HYDRAULIC POWER TOOLS FOR INDUSTRY

Send for your copy of Bulletin A-5 . . . It's Free.

DISTRIBUTOR PRODUCTS DIVISION
WATSON-STILLMAN
ROSELLE, NEW JERSEY

For more details circle NED-5167 on enclosed inquiry slip

SALIENT FEATURES OF HAR-BAR BARRIERS

1. High enough to stop your car.
2. Low enough to clear your bumper guards.
3. Barrier is above ground — no drainage problem.
4. Barrier is above ground — no rotting of wood.
5. Automatically spaces your cars.
6. Follows contour of your ground.
7. Easily installed — just line up and drive the anchor pins.
8. Easily moved — just pull the anchor pins.
9. Easy to clean under.
10. Easy to maintain.
11. Installed on any kind of surface — black top, cement, macadam, gravel or cinders.
12. It really dresses up your parking lot.
13. You always stop against your tire—no shock.

Send us a plot plan of your parking lot—we do the engineering free.

HARRIS-BARRIER INC. 5407 N. PENNSYLVANIA STREET INDIANAPOLIS 5 - INDIANA

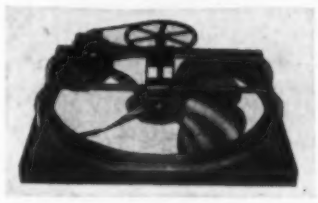
For more details circle NED-5168 on enclosed inquiry slip

VERTICAL SHAFT ENGINE is four-cycle gasoline type

Weighing 31 lb, model V-1 vertical-shaft air-cooled gasoline engine features a float feed and pressure lubrication system with gear oil pump. This 2-hp model has a flyball governor, running in oil, plus a pressure lubricated upper bearing. Made by **Lauson Co.**, Dept. ND, New Holstein, Wis.

For more details circle NED-5169 on enclosed inquiry slip

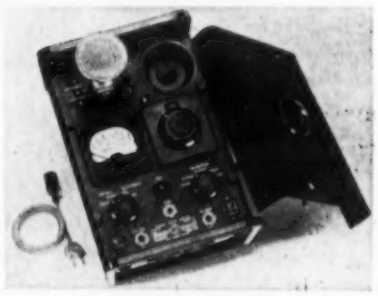
VERTICAL DISCHARGE FAN is vibration-free and noiseless



Featuring compact, flat design, this vertical discharge fan is easily installed. It is not attached to structure, but rides vibration and noise-free in a nest of foam rubber. Fan has die-formed tubular frame and is mounted in heavy gage steel orifice plate. It is offered in five sizes ranging from 24 to 48 in. which are powered with ⅓ to ½-hp motors. Statically and dynamically balanced deep-pitch blades operate quietly. Made by Murray Co. of Texas and distributed by **H. C. Biglin Co.**, 177 Harris St. N.W., Atlanta, Ga.

For more details circle NED-5170 on enclosed inquiry slip

SOUND-LEVEL METER measures working area noise



Type 1551-A sound-level meter can be used for studying noise levels in working areas, measuring product noise and evaluating the characteristics of acoustic materials. Overall frequency response of its two amplifiers is flat from 20 cycles to 20 kilocycles. Characteristics conform to ASA specifications. Direct measurement can be made over a range from 24 to 140 decibels. Self-contained batteries supply power for portable operation, but a small alternating current power supply is available for continuous use. The diaphragm type Rochelle salt crystal microphone is removable and replaceable with new high fidelity types. Output is available for operating such auxiliary equipment as frequency analyzers, level and tape recorders and oscillographs. Made by **General Radio Co.**, Massachusetts Ave. & Front St., Cambridge 39, Mass.

For more details circle NED-5171 on enclosed inquiry slip

LISTEN TO YOUR COMPRESSOR
frequent running costs you money!

CHAMPION

aero-dynamic design . . .
cuts running time 6 ways!

Compressors that run too frequently cost you money! Excessive running causes excessive wear, raises electric costs by increasing consumption, and slows work through reduced pressure. Champion Air Compressors are Aero-Dynamically engineered to deliver cool air to the receiving tank in a minimum of running time. Get all the facts on Champion's Aero-Dynamic Compressor design.

this FREE MANUAL shows you how to select the proper air compressor. Write for your copy TODAY!

5784

CHAMPION PNEUMATIC MACHINERY CO.
837 N. Pleasant Street Princeton, Illinois

PRESSURE CLEANERS • AIR HOSE REELS • AIR ACCESSORIES

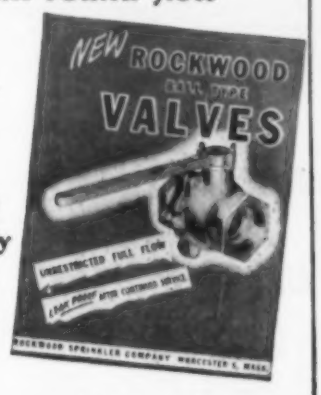
For more details circle NED-5172 on enclosed inquiry slip

Leakproof, full round flow

BALL VALVE

resists wear longer opens, closes quickly with quarter turn

GET THIS FREE BOOKLET FOR FACTS!



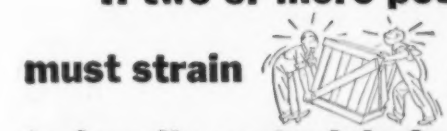
Ideal for handling water, air, carbon dioxide, nitrogen and other gases, paraffin and asphalt base petroleums, alcohol, paper fluids and many other types of liquids and gases.

Full, round, pipe-sized open area of Rockwood ball valves prevents shape of stream from altering . . . allows piping to handle fluids with minimum friction loss. Each valve constructed with chrome-plated, floating bronze ball that is extremely resistant to scratching, pitting, abrasion. Valve does not depend on mechanical parts to maintain proper alignment of ball and seat. Opens and closes with a quarter turn. Approved by Underwriters' Laboratories, Inc. For complete details, write us direct. Distributors in all principal cities.

ROCKWOOD BALL VALVES
ROCKWOOD SPRINKLER COMPANY
44 HARLOW STREET, WORCESTER 5, MASS.

For more details circle NED-5173 on enclosed inquiry slip

If two or more people must strain or heft to handle materials for you . . .



you need this improved YALE hand lift truck

• WRESTLING heavy crates, cartons, boxes, drums and other bulky materials tires workers—cuts efficiency—raises handling costs for you. A modern YALE Hand Lift Truck will speed all your handling jobs . . . eliminate rehandling . . . and quickly pay its low cost in time and manpower saved.

Select your new, easier-rolling YALE Hand Lift Truck from a complete line of Single or Multiple Stroke Mechanical, and Hydraulic Lift models. Get the best solution to your special handling problems . . . get quality performance that makes the YALE name first in materials handling equipment of every kind. Write for free illustrated catalog today. Or consult your local Classified Directory for the YALE Representative nearest you.

Yale hand lift trucks help in all these and many other places today

Supermarkets
Appliance Dealers
Freight Terminals
Hardware Dealers
Mills
Factories
Nurseries
Garages
Warehouses
Building Supply Dealers

YALE & TOWNE

MAIL THIS COUPON TODAY

The Yale & Towne Manufacturing Co., Dept. 376
Roosevelt Blvd. and Haldeman Ave.
Philadelphia 15, Pa.

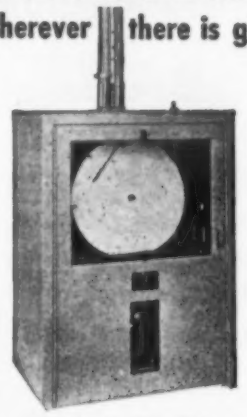
Please send me your free illustrated catalog on the YALE Hand Lift Truck.

Company_____
Name_____ Title_____
Street_____
City_____ State_____

YALE is a registered trade mark of The Yale & Towne Manufacturing Company

YALE GAS AND ELECTRIC INDUSTRIAL TRUCKS • YALE HAND AND ELECTRIC HOISTS
YALE WORKSAVERS • YALE PUL-LIFTS

For more details circle NED-5174 on enclosed inquiry slip



ARCCO-ANUBIS 'Dry-Air GAS GRAVITOMETERS

This new Arcco-Anubis Dry Air Gas Gravitometer determines and records specific gravity of gases automatically corrected to the humidity content of the air. The difference in weight between a column of GAS and equal column of DRY AIR is measured. This ratio represents the true specific gravity of the sample.

One bell of the instrument is filled with gas which is being measured, and the other bell is filled with dry air. Otherwise, except for the new instrument having one column for gas and one column for dry air, the unit is identical in operation to the standard gas gravitometer. When calibrated and properly installed, these instruments require little attention other than to wind the clock, ink the pen, and change the chart. Send for bulletin No. 101.

AMERICAN RECORDING CHART CO.
3113 E. 11th St. • Los Angeles 23, Calif.

Available for Early Delivery

▲ For more details circle NED-5175 on enclosed inquiry slip ▲

SOLID... as a rod
FLEXIBLE... as a wire rope

TRU-LAY Push-Pulls snake around obstructions. Provide positive remote action for operating clutches, gates, slides, etc. Operate while flexing. Weatherproof, dustproof types. Capacities up to 1000 pounds input.

Write our Detroit office today for DH-287

TRU-LAY PUSH-PULL CONTROLS

ACCO
AUTOMOTIVE AND AIRCRAFT DIVISION
AMERICAN CHAIN & CABLE
601 Stephenson Bldg., Detroit 2
2475 Porter St., Los Angeles 21 • Bridgeport, Conn.

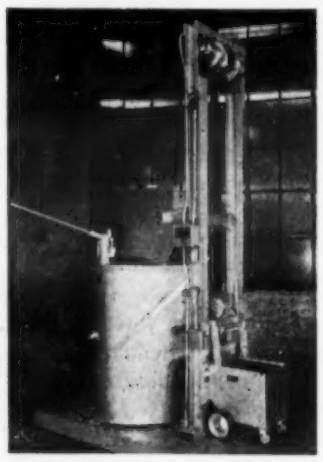
▲ For more details circle NED-5176 on enclosed inquiry slip ▲

SUBMERSIBLE LIQUID PUMP
compact unit has 1000 gph capacity

Hermetically sealed and completely submersible, model P-104 all-purpose centrifugal pump will handle wide variety of liquids, such as water, ink, oil, alcohol, cleaning fluids and particularly industrial coolants. It can be placed directly into liquid without complicated connections and has capacity of 1000 gal per hr at zero head with a maximum head of 9 ft. Pump is available in a nonautomatic type for installations requiring continuous or separately controlled operation; completely automatic type with wide variety of differentials available from 2 in. upward; and in a manual-automatic type for use where either automatic or manual starting is required. Shaded-pole electric motor has one-piece cast bronze impeller mounted to motor shaft. Made by **Kenco, Inc.**, 1125 N. Ridge Rd., Lorain, O.

▲ For more details circle NED-5177 on enclosed inquiry slip ▲

AUTOMATIC METAL LOADER
detachable cart, raises, dumps loads



All types of metal melting operations can be speeded up with automatic metal loader adaptable to any make melting pot. Rubber-tired detachable metal carts of 2.6 cu ft capacity are rolled into lifting position, then raised and dumped by electric hoist apparatus having ½-hp 220-v three-phase 60 cycle motor. Limit switches prevent operation until cart is in lifting position. Hoist frame is held in position by fastening to floor and to side of pot. Top support is unnecessary, but is available if desired. Cable speed is 12 ft per minute. Clearance of 5 ft 10 in. from flange of pot to top of hoist frame is required. Made by **C. M. Kemp Mfg. Co.**, 405 E. Oliver St., Baltimore 2, Md.

▲ For more details circle NED-5178 on enclosed inquiry slip ▲

DO YOU KNOW? A 20-minute sound motion picture film showing processing features and materials handling applications of the full automatic barrel plating machine will be shown upon request to interested groups. Just write to Frederic B. Stevens, Inc., 18001 Eighteenth St., Detroit 16, Mich.

▲ For more details circle NED-5179 on enclosed inquiry slip ▲

SLASH FASTENING COSTS

on LIGHT SHEET METAL ASSEMBLIES!

WASHER TYPE **PALNUT** TRADE MARK **LOCK NUTS**

Handle ONE part instead of TWO or THREE

Low-cost, one-piece Washer Type PALNUT Locknuts do the job of an ordinary nut, lockwasher and plain washer combined. You save parts and handling operations—get speedy, assembly with hand or power drivers. PALNUT double-locking spring action holds tight under vibration. Built-in washer spans holes and slots. Wide range of standard sizes. Send details of assembly for free samples and literature.

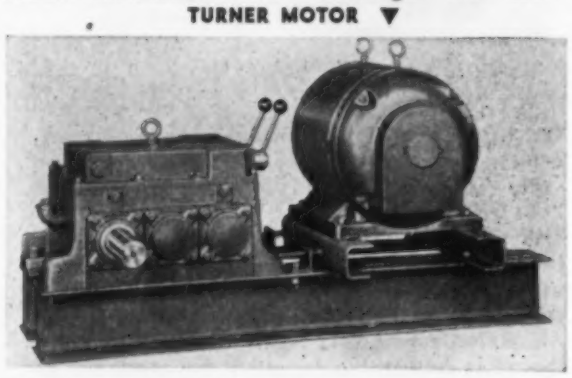
The PALNUT Co., 45 Cordier St., Irvington 11, N. J.
In Canada: P. L. Robertson Mfg. Co., Ltd., Milton, Ontario

PALNUT TRADE MARK **LOCK NUTS** for quick, secure fastening at low cost

▲ For more details circle NED-5180 on enclosed inquiry slip ▲

TURNER
4-SPEED Transmission
from fractional HP through 60 HP

TURNER MOTOR ▼



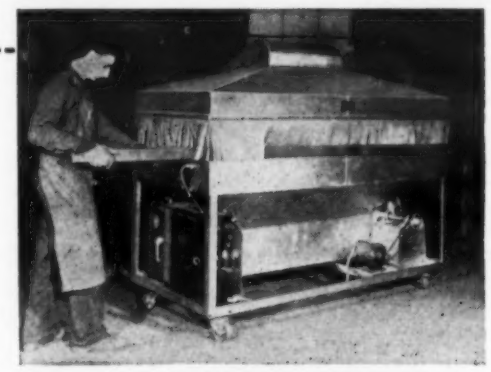
Here is the answer to many power transmission problems. A four speed transmission in sizes from fractional HP through 60 HP. For use with any speed electric motor or engine. Available in a wide range of speed ratios including certain six and nine speed transmissions.

WRITE US TODAY — OUTLINE THE DESIRED OUTPUT SPEEDS, SIZE AND SPEED OF MOTOR OR ENGINE, A BRIEF DESCRIPTION OF YOUR PROBLEM AND WE WILL FORWARD COMPLETE DETAILS.

TURNER UNI-DRIVE CO.
3420 Terrace Street Kansas City 8, Mo.

▲ For more details circle NED-5181 on enclosed inquiry slip ▲

PERECO *Electric* FURNACES



Typical *Special* PERECO FURNACE

This special portable furnace is only one example of Pereco's capability and interest in helping you with your specific heat treating problems. It was designed to heat aluminum bars, in line production, to 300° F. prior to a press forming operation. The 6 ft. bars are easily loaded and unloaded through an asbestos strip curtain at ends and side. Heat, provided by fin type strip heaters, is held uniform by a recirculating blower system. It is supplied with all controls ready for operation. Perhaps we can also help you! Write us.

STANDARD AND SPECIAL FURNACES FOR TEMPERATURES 450° to 5000° F.

PERENY EQUIPMENT COLUMBUS OHIO

PERENY EQUIPMENT CO.
Dept. G, 893 Chambers Rd., Columbus 12, Ohio

▲ For more details circle NED-5182 on enclosed inquiry slip ▲

New MHS Liftveyor ready to go to work for you *anywhere*

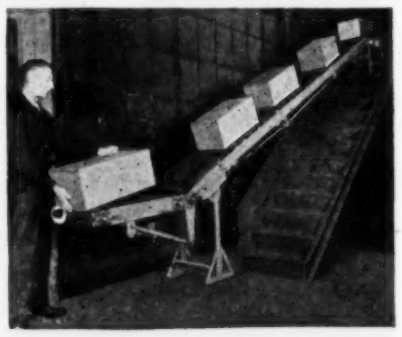
Liftveyor is a complete unit ready for service.

You don't have to be a mechanic to set it up or to move it.

Incorporates the latest design ideas all proven in actual service.

Sturdy and dependable without being cumbersome.

Engineered by conveyor specialists with more than 30 years of materials handling experience.



ASK FOR INFORMATION ALSO ON
Roller conveyors — Horizontal belt conveyors
Live roller conveyors — Overhead conveyors
Complete handling systems

Mechanical Handling *Systems, Inc.*
4615 NANCY AVE. • DETROIT 12, MICH.
Offices in Principal Cities
In Canada: Canadian Mechanical Handling Systems, Ltd.

▲ For more details circle NED-5183 on enclosed inquiry slip ▲

No alignment problems here

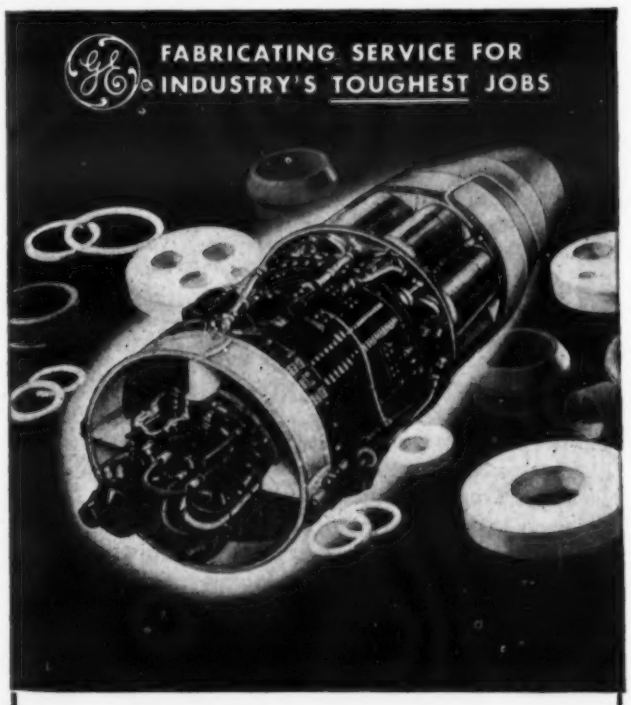
This slim girl is tightening the tapered split hub of the Worthington QD Sheave on the shaft of a big machine.

The 48 in. rim she'll place on the hub (with the aid of a hoist) weighs 440 lbs, about four times her own weight. But she won't have to do any difficult juggling to mount the big sheave with the large end of the taper bore over the small end of the taper cone QD hub. She's already taken care of alignment with the hub.

And if drive arrangements are changed later, it will be easy to remove the sheave and place another size on the same hub. Write for more information to Worthington Corporation, formerly Worthington Pump and Machinery Corporation, Multi-V-Drive Sales Division, Buffalo, N.Y.

WORTHINGTON
Multi-V-Drives

▲ For more details circle **NED-5184** on enclosed inquiry slip ▲



Why you should specify

G-E SILICONE RUBBER PARTS

for extra-high-temperature seals

When designs call for sealing rings and gaskets subject to unusual extremes of temperature, specify General Electric silicone rubber parts! They're ideal for high-heat sealing applications because they are able to withstand long exposure to 450 F without deteriorating or becoming tacky. G-E silicone rubber parts have low-compression set even under high heat, possess excellent dielectric and insulating properties.

Jet engines, for example, have many uses for G-E silicone rubber parts: oil seals, fire-wall seals and ignition cable shields. Why not investigate the remarkable properties of General Electric silicone rubber parts for *your* designs?

General Electric's complete fabricating service also offers you:

G-E mycalex parts—with a unique combination of properties, including high dielectric strength, dimensional stability and heat resistance up to 700 F.

G-E sealing caps and sleeves—to protect tubing and small parts from air, moisture, dirt, paint and chemicals . . . to insulate wires . . . and protect valves from mishandling.

For more information, write to General Electric Company, Section 111-7E, Chemical Division, Pittsfield, Mass.

GENERAL ELECTRIC 111-7

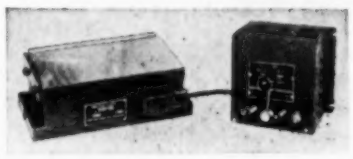
▲ For more details circle **NED-5185** on enclosed inquiry slip ▲

PICTOGRAPH TAPE
simplifies making graphic charts

Pictorial symbols or pictographs are now printed on pressure-sensitive tapes to enable anyone to construct professional looking graphic charts. Initial patterns include figures of men, women, children and stacks of coins or bills. Many other symbols will be available. Each symbol is repeat printed on rolls ⅝-in. wide and 300 in. long. Tape readily adheres to paper, cloth, plastics, or to charting board which is also available. Made by **Chart-Pak, Inc.**, Dept. 1, 104 Lincoln Ave., Stamford, Conn.

▲ For more details circle **NED-5186** on enclosed inquiry slip ▲

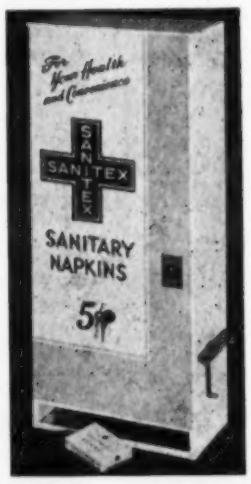
MAGNETIC CHUCKS
for small machines and bench work



Advantages of magnetic chucking can be applied to smaller machine tools and bench work through use of three small electromagnetic chucks measuring 5 x 10 in., 6 x 12 in. and 6 x 18 in. They operate on any alternating current voltage and hold pieces to their extreme edges. Units are moisture and shock proof and are available with standard accessories. Made by **Hanchett Magnet-Lock Corp.**, Dept. 270, Big Rapids, Mich.

▲ For more details circle **NED-5187** on enclosed inquiry slip ▲

SANITARY NAPKIN VENDER
provides 48-napkin capacity

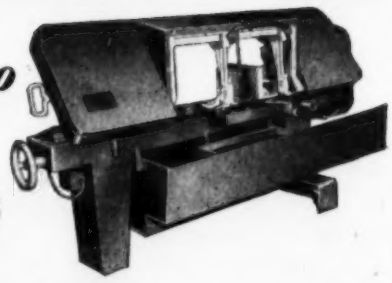


Designed primarily for institutional and industrial installations, this Vend-Master sanitary napkin vending machine has large 48-napkin capacity to minimize filling and collecting problems. Machine is equipped with an A.B.T. slug rejector for either 5 or 10 cent vend. Front panel is brightly illustrated in two-tone blue on white baked enamel. Of all steel welded construction and measuring 6½ x 12½ x 30 in., dispenser can be mounted on wall, or to 30-in. high stand which provides storage space for one gross napkins. Made by **Vend-Rite Mfg. Co.**, Dept. K, 1534 N. Halsted St., Chicago 22, Ill.

▲ For more details circle **NED-5188** on enclosed inquiry slip ▲

GET ACCURACY that SAVES STOCK . . .

. . . get *Kalamazoo* METAL CUTTING BAND SAWS



Here's *real* precision metal sawing that cuts waste to a minimum, saves hard-to-get stock. *Kalamazoo* Band Saws cut bars, rounds, flats, angles, odd shapes to within a few thousandths of size. What's more, there's an absolute minimum of kerf and *no* burr.

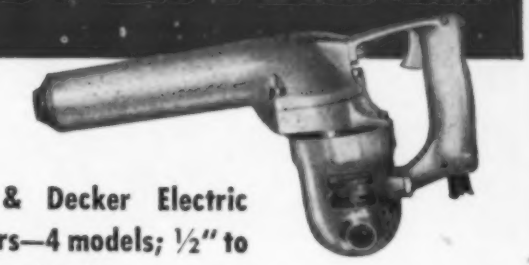
You can get Kalamazoo Metal Cutting Band Saws in three sizes . . . for cutting 6" to 12" rounds. 6" x 10" to 12" x 20" flats. Each model can be had with coolant system for continuous cutting. Each is available with casters for complete portability. Write for details on the many exclusive *Kalamazoo* features that spell *better cutting at lowest cost to you.*

MACHINE TOOL DIVISION

***Kalamazoo* TANK and SILO CO.**
612 HARRISON ST., KALAMAZOO, MICHIGAN

▲ For more details circle **NED-5189** on enclosed inquiry slip ▲

NEED A HAMMER?
Switch to BLACK & DECKER Power!



Black & Decker Electric Hammers—4 models; ½" to 2" capacity in concrete.

Black & Decker Electric Hammers pack plenty of punch for high-speed drilling and channeling in concrete, stone or brick; doing light demolition; removing rust and scale from metal; driving spikes; scuffing concrete surfaces. Deliver thousands of hammer blows per minute. Light weight, husky, completely self-contained, no transformers needed. See your nearby B&D Distributor. Write for free catalog to: THE BLACK & DECKER MFG. CO., 662 Pennsylvania Ave., Towson 4, Md.

LEADING DISTRIBUTORS EVERYWHERE SELL
Black & Decker PORTABLE ELECTRIC TOOLS

▲ For more details circle **NED-5190** on enclosed inquiry slip ▲

Another
FIRST by ARO

A REVOLUTIONARY SCREW DRIVER AND NUT SETTER

ARO's new push-button valve means *instant reverse action* . . . no need to remove from work . . . no stopping to turn levers . . . no wasted time.

Adjustable clutch (available with positive clutch) Length 7-11/16" . . . outside diameter 1-5/16" . . . weight 1.4 lb.

This outstanding tool must be seen in action to appreciate its amazing action. Write for literature. **The Aro Equipment Corporation, Bryan, Ohio.**
Aro Equipment of Canada, Ltd., Toronto

ARO AIR TOOLS Also . . . LUBRICATING EQUIPMENT . . . HYDRAULIC EQUIPMENT . . . AIRCRAFT PRODUCTS . . . GREASE FITTINGS

▲ For more details circle **NED-5191** on enclosed inquiry slip ▲

TEFLON IMPREGNATED ASBESTOS PACKING

The Advantages of Teflon
PLUS
Greater Resiliency
Moderate Cost

Chemically inert, heat-resistant, anti-hesive Teflon has solved many packing problems. But under certain conditions, Teflon's cold-flow characteristic causes trouble. The solution to cold-flow is Flexrock #401 braided white asbestos packing impregnated *throughout* with Teflon.

#401 offers solid Teflon's advantages *plus* superior resiliency, permitting a tight, lasting seal at low gland pressure, against *acids, alkalis and solvents.* #401 is versatile, eliminates the need for costly, machined Teflon rings. Stock it for applications demanding absolute *non-corrosion, non-contamination.* Won't "seize" a shaft or spindle; serviceable from −100°F. to 500°F. In continuous lengths, square section, from ⅛" to 1" by 1/16" increments.

We furnish a complete line of *Teflon Packing:* solid or impregnated in endless ring or continuous braided construction; *Teflon Gaskets:* solid or jacketed; *Teflon Stock:* sheets, tape, cylinders, rods, tubing, bars. *Also, special shapes.*

Mechanical Packing Division
FLEXROCK COMPANY
PHILADELPHIA 4, PA.

Mechanical Packing Division
FLEXROCK COMPANY
3603 Filbert Street, Phila. 4, Pa.

☐ Send more information on #401 Packing
☐ Send information on these other Teflon products _____

Name _____ Title _____
Company _____
Address _____
City _____ Zone ____ State _____

Please clip coupon to Company letterhead

▲ For more details circle **NED-5192** on enclosed inquiry slip ▲

Whatever your handling problems include, chances are the Zip can save you time and money with fast, effective "thru-the-air" handling. It's a real wire rope electric hoist — with full magnetic push button control. Safer — more dependable — built for lifetime service. 2,000 lbs. capacity; with bolt, hook, or trolley mounting. It's America's finest small hoist.

SEND FOR YOUR FREE COPY

This fully illustrated 20-page bulletin will give you many cost-cutting ideas. Write for it today. Ask for NEW ZIP-LIFT Bulletin.

HARNISCHFEGER CORPORATION
4537 W. NATIONAL AVENUE • MILWAUKEE 46, WISCONSIN

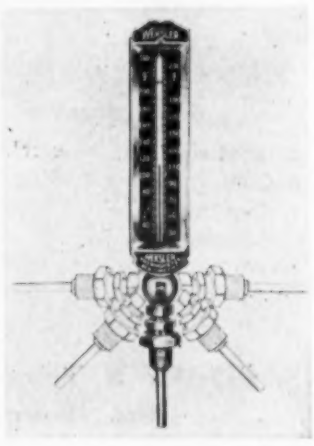
For more details circle NED-5197 on enclosed inquiry slip

SAMPLING VISCOMETER
automatic unit has 3-minute cycle

Function of this viscometer is to withdraw automatically a small sample of liquid from a closed system, bring it to any desired temperature, then measure and record viscosity and discharge it. Viscosity determinations are made without operator assistance. Test samples can be as small as 25 cc and measurements can be made as often as every 3 minutes. Viscometers are equipped with alarms to signal high or low viscosities in continuous processes. One alarm can be set for end point and other used to indicate approach of the end point when used for batch processes. Made by **Norcross Corp.**, 247-B Newtonville Ave., Newton 58, Mass.

For more details circle NED-5199 on enclosed inquiry slip

ADJUSTABLE ANGLE THERMOMETER
movable through 180 degrees



Industrial engineers need not waste time in the selection of precise angles required on thermometers to be designed into new equipment if they specify Adjust-Angle thermometers. In addition, installation problems are simplified by this thermometer which can be positioned to any 180-degree arc, front or back, left or right. They are visible at wide angles and resist shock and vibration. Made by **Weksler Thermometer Corp.**, Dept. D, 52-56 W. Houston St., New York 12, N. Y.

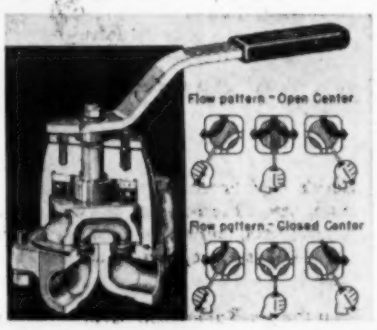
For more details circle NED-5200 on enclosed inquiry slip

COATING MACHINE
applies coatings to 48-in. materials

Material up to 48 in. wide and 3 in. thick can be coated at 30 to 90 ft of linear travel per minute by 32-B Rollacoat Finisher. Higher or lower speeds are available. Six accessory material handling kits make possible application of machine to practically any type of production coating line where flat material is finished and controlled thickness coating is necessary. Kits include feed table and adjustable edge guide, feed conveyor, delivery table conveyor, driven feed rolls, extra long feed table with multiple drive rolls for long and heavy sheets, brushing unit and paint circulating pump. Made by **Gasway Corp.**, 6465 N. Ravenswood Ave., Chicago 26, Ill.

For more details circle NED-5201 on enclosed inquiry slip

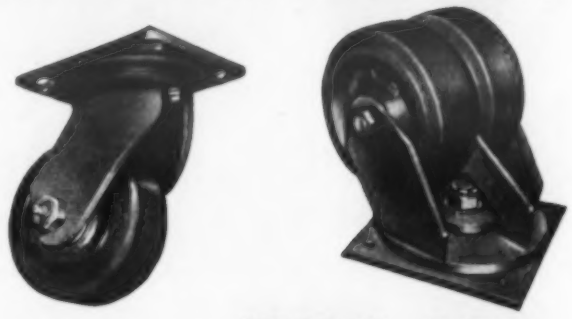
MANIPULATOR VALVE
for 0 to 3000 psi service



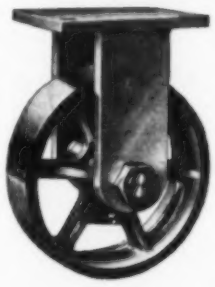
Shear-Seal valving principle incorporated in this 0 to 3000 psi service manipulator valve is illustrated in accompanying diagrams. Tubular sealing members maintain a balance between line pressure and sealing force. Valve actuation takes place along the path of least resistance by shearing the stream between two lapped members. Free handle movement facilitates manipulating and inching cylinders and hydraulic motors. Absolute shutoff to prevent creeping is attained. Valves are offered in normally-open and normally-closed flow patterns from ¼ to 1-in. pipe size, and for manifold mounting. Made by **Barksdale Valves**, 1564 E. Slauson Ave., Los Angeles 11, Calif.

For more details circle NED-5202 on enclosed inquiry slip

FROM ANY ANGLE...



...THEY ARE THE *BEST!*



● Albion Industrial Casters are better-built to better serve you. Engineered to save you dollars and man hours by moving greater loads faster, safer, smoother . . . and to do it economically!

Albion casters are readily available in any size, style, capacity and wheel type. Make Albion your *one dependable* source for all industrial casters and wheels.

Represented in Canada by
C. J. McDONALD
365 Yonge St., Toronto

ALBION INDUSTRIES, INC.
ALBION • MICHIGAN

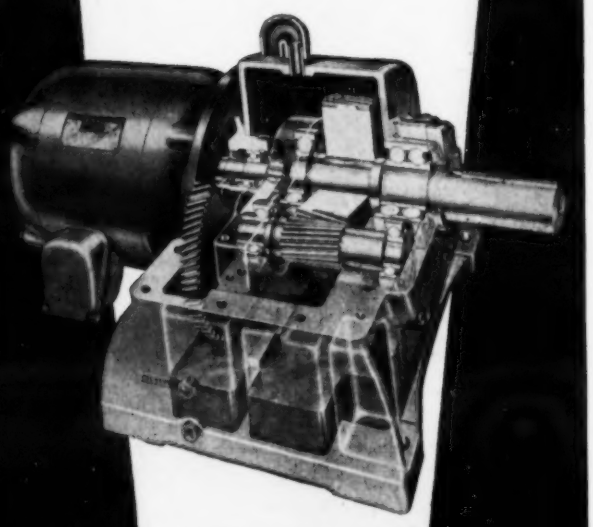
For more details circle NED-5203 on enclosed inquiry slip

Here's how to cut servicing time on Gearmotors

The answer is—use Gearmotors that have split-case construction. For either electrical or mechanical inspection or maintenance, split-case construction saves many hours of costly time by providing easy accessibility to the gears or the motor.

Simply by removing the top half of the gear case, the gears or the motor can be inspected or repaired without touching the mounting bolts—without draining the oil—without disturbing the connected load. The complete job takes but a few minutes.

Get the complete details on Life-Line Gearmotors from your Westinghouse representative. Or write Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pa.
J-07316



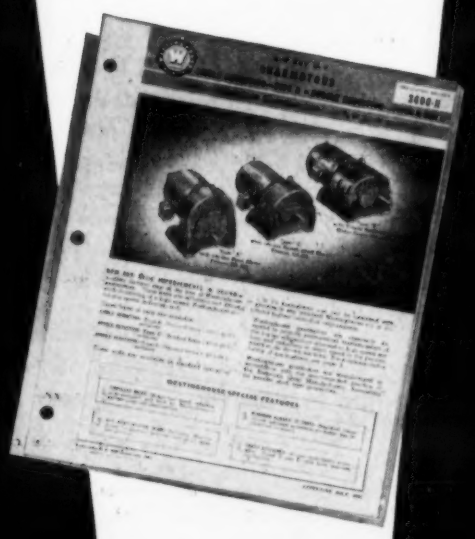
YOU CAN BE SURE... IF IT'S Westinghouse
Life-Line GEARMOTORS

For more details circle NED-5198 on enclosed inquiry slip

Get your free copy of this Gearmotor booklet

Here are eight pages packed full of factual information on Life-Line Gearmotors. Application data, gearing specifications, motor specifications, methods of mounting, control selection and special features are included in this ready reference manual.

A free copy is waiting for you. Just send a note asking for a copy of DB-3600 to Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pennsylvania. Or, call your Westinghouse representative and ask him for your copy.
J-07317



YOU CAN BE SURE... IF IT'S Westinghouse
Life-Line GEARMOTORS

For more details circle NED-5204 on enclosed inquiry slip

Solve CONTROL PROBLEMS with TELEFLEX

Are mechanical remote controls your problem? Then consider these advantages of Teleflex:

- Efficient in both tension and compression
- Unlimited in rotary motion
- Assembled from stock parts
- Rugged and flexible
- Easy to install and maintain

Our engineers will cooperate with you on any problem involving mechanical remote controls.

TELEFLEX INCORPORATED
248 WEST WINGOHOCKING STREET
PHILADELPHIA 40, PA.

WRITE FOR CATALOG 300 C

For more details circle NED-5205 on enclosed inquiry slip

You get improved overload protection with Trumbull motor starters

Whether you prefer push button or toggle mechanisms on your manual motor starters, the one requirement you should always insist on is *sure* overload protection. You get *improved protection* with Trumbull motor starters because they give you:

- *fast action* on overload or stalled-rotor conditions
- *positive, quick-action tripping* without kickouts from vibration
- *easy resetting* with contacts that can't be closed against overload

A choice of heater units in fractional ampere steps to match heating curves of every motor. Up to 7½ horsepower. General purpose, watertight or explosion-proof enclosures. Special loom switch for textile applications. Write for circulars TEC 7 and 317A on Manual Starters.

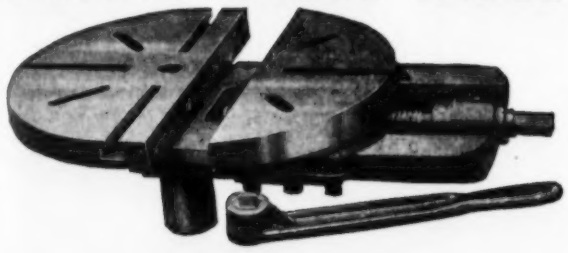
TRUMBULL (T) ELECTRIC

DEPARTMENT OF GENERAL ELECTRIC COMPANY
PLAINVILLE, CONNECTICUT

For more details circle NED-5206 on enclosed inquiry slip

Try the MODERN

SAFETY DRILL TABLE



For Faster, SAFER Work in Your Maintenance Department

Combines a drill table, a vise, a set of parallels and V block. No more lost fingers from hand held jobs that slip. No more 30 minute set-ups for a 1 minute drilling operation. Made in 6 sizes from 8" to 28" dia. We guarantee each Safety Drill Table will save its cost on labor alone in 6 months, to say nothing of plant down time when vital maintenance is delayed even a few minutes.

FREE TRIAL OFFER

WRITE FOR FREE FOLDER

Shows many typical set-ups and use on radial drills. Complete specifications on all models. Covers MONEY BACK GUARANTEE and 30 DAY FREE TRIAL OFFER.

MODERN MACHINE TOOL CO.
Jackson, Michigan

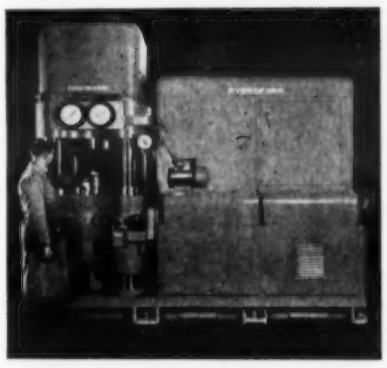
For more details circle NED-5207 on enclosed inquiry slip

SURFACE FORM GRINDER for flat, grooved, curved surfaces

Automatic grinding of flat, grooved or curved surfaces on roots of jet engine compressor blades and turbine buckets is performed by style 84 surface form grinder. Reciprocating work table is hydraulically operated and electrically controlled and accommodates removable work fixtures. Grinding spindle is mounted horizontally and is adjustable endwise for positioning preformed wheels in relation to the dresser. Belts and pulleys are used to change wheel speeds. Motor driven cam type diamond dresser, mounted above wheel spindle, shapes the grinding wheel. Dressing is part of automatic machine cycle, but can be controlled manually. A central handwheel controls grinding size. Made by **Ex-Cell-O Corp.**, 1216 Oakman Blvd., Detroit 32, Mich.

For more details circle NED-5208 on enclosed inquiry slip

METAL FORMING MACHINES punch moves up into pressurized diaphragm-capped oil cavity



Operating principle of Hydroform metal forming machines is upward movement of solid punch member into a flexible, hydraulically pressurized die member which is actually an oil cavity capped with a flexible diaphragm. Sheet metal between two members is hydraulically formed to shape of punch by uniform pressure from all sides. Stripping is automatic as punch is retracted. Surface of blank is not scuffed or scarred and minimum abrasive action is imposed on punch.

Flexible diaphragm consists of a wear sheet and inner member which confines hydraulic oil in forming cavity. Both are easily replaced. Maximum pump pressure developed by hydraulic system is 8000 psi, although 15,000 psi can be generated in flexible die as punch moves up during forming process. Machines are marketed in 12 and 26-in. sizes and can be made in sizes up to 40 in. Made by **Cincinnati Milling Machine Co.**, Marburg & South Sts., Cncinnati 9, O.

For more details circle NED-5209 on enclosed inquiry slip

HARD FIBRE Carrying & Shipping CASES

FOR INSTRUMENTS • ELECTRICAL & ELECTRONIC DEVICES • ARMY-NAVY EQUIPMENT • SAMPLES • PORTABLE PRODUCTS • TOOLS, etc.

Rugged Case for "held-in-position" instrument, with plain and felt compartmented tray.

BAL has specialized in durable, hard vulcanized fibre products of every kind, for more than 50 years. Reinforced edges, riveted, double-thick to resist wear. Cases designed to fit the product, balance the load, and give full protection.

Mfrs. Fibre cases, trucks, kits and mill boxes.

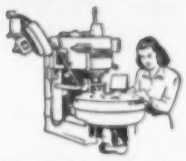
"SINCE 1898"

"BAL" BUILT WITH A CONSCIENCE

WILLIAM BAL CORPORATION
11 Johnson Street, Newark 5, N. J.

For more details circle NED-5210 on enclosed inquiry slip

MULTIPRESS®



Lower Production Costs
Higher Production Quality
Safer, Easier Tool Operation

Multipress is a cost-cutting production tool proved by nearly seven thousand applications in its first eight years. Its smooth, oil-hydraulic *precision control* gives you high-speed accuracy . . . permits fast tool changes . . . brings quieter, safer, more uniform operation. Rugged and compact, it stands up under long, hard use. Manual and automatic controls for almost any ram action or operating sequence. Index Tables for automatic rotary feed, and many other Multipress accessories available. Bench-size and floor models, in 1-ton to 50-ton capacities. Send for data sheets on Multipress as applied to bending, broaching, blanking, crimping, assembling, drawing, forming, punching, slotting, riveting or other specific needs. Write today!

The DENISON Engineering Co.
1151 Dublin Road, Columbus 16, Ohio

DENISON HydrOILics

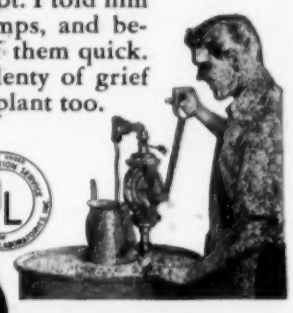
For more details circle NED-5211 on enclosed inquiry slip

The one precaution Tom overlooked . . .

Tom McBride was the best safety engineer our company ever had. He had an uncanny sense of detecting danger, and seemed to do the things necessary to prevent accidents before they occurred. We won three safety citations under Tom's direction. Our plant was clean as a pin.

But then the roof fell in. A worker in the machine shop slipped in a pool of spilled oil, fell and broke his arm—a nasty break at the elbow. A day later a boy in the press room had a similar accident, except he sprained his back. It looks like it may be serious. But the pay-off was the fire in the tool crib. Someone dropped a lighted cigarette in some oil drippings, and I'm ashamed to tell you what happened. Among other results, it damaged some dies that will take months to replace, and almost lost an important customer because we couldn't deliver on time.

Careful as Tom is, he didn't realize that there are better ways to transfer oil than by drawing it through a spigot. I told him about Tokheim Hand Pumps, and believe me he bought 30 of them quick. You may save yourself plenty of grief if you buy some for your plant too.



QUALITY TOKHEIM DOUBLE-ACTION HAND PUMPS

Order from your dealer, your oil company, or your Tokheim representative. Write factory for literature.

General Products Division
TOKHEIM OIL TANK AND PUMP COMPANY
1656 Wabash Avenue, Fort Wayne 1, Indiana
Factory Branch: 1309 Howard Street, San Francisco 3, California

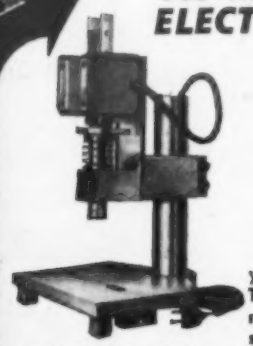
For more details circle NED-5212 on enclosed inquiry slip

FOR LIGHTNING-FAST LOW-COST PRODUCTION

Use the versatile ELECTROPUNCH

WIDELY USED TO

STAKE · MARK · SWAGE · CUT OFF · RIVET · CRIMP · BEND · PUNCH · DIMPLE



Produces up to 10,000 pieces per hr.!

For as low as $90.75, you can buy an ELECTROPUNCH (lightest model illustrated) and start increasing your small parts production. This low-cost, all-electric impact hammer features *controlled impact.* Ideal for steel stamping. Produces up to 10,000 pieces per hr. using automatic switching—up to 5,000 pieces per hr. with hand or foot switching.

Easy-to-use ELECTROPUNCH is portable, uses only one sq. ft. of bench space, plugs into any 115 V., A.C. outlet.

Write for descriptive folder.

BLACK & WEBSTER, INC.
Dept. 1, 445 Watertown Street, Newton 58, Mass.
Phone: Frank Webster — Bigelow 4-6370

▲ For more details circle NED-5218 on enclosed inquiry slip ▲

low level cost... all level comfort with DUNHAM FIN-VECTOR RADIATION

Sloping Top

Flat Top

Expanded Metal Top

Put Dunham Fin-Vector Radiation *at any height* along outside walls and you get the heat you need—for *less.*

Materials used are those best suited to rapid heat transfer. Finned pipe heating elements can be installed one, two or three tiers high.

Light in weight, Fin-Vector requires few supports . . . is easy to handle. Three cover designs—various sizes and types of heating elements—to choose from. Made in lengths from 2 ft. to 10 ft. in 6 in. increments to reduce on-the-job cutting, speed assembly.

For further information, WRITE FOR BULLETIN 1251-14.

DUNHAM

C. A. DUNHAM CO.
400 W. Madison St., Chicago 6, Ill.
In Canada: C. A. Dunham Co. Ltd., Toronto
In England: C. A. Dunham Co. Ltd., London

HEATING SYSTEMS AND EQUIPMENT

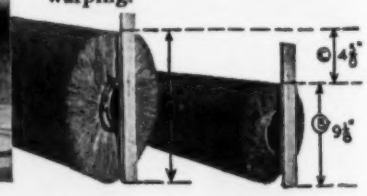
▲ For more details circle NED-5219 on enclosed inquiry slip ▲

5 times the Wear

A Fullergript fiber and wire mixture brush before use in floor sweeper.

B Same brush after 10 months service — 5 times as long as the ordinary brush lasts.

C Note that although brush has worn down 4⅝", there is no evidence of material shedding, loose backing or warping.



Users of power-driven floor sweepers consistently emphasize the longer brush life, the improved sweeping efficiency and the saving of man-hours with Fullergript brushes! Write us for information.

FULLER BRUSH FULLERGRIPT

At home... in business, too

THE FULLER BRUSH COMPANY • INDUSTRIAL DIVISION
3530 MAIN STREET • HARTFORD 2, CONN.

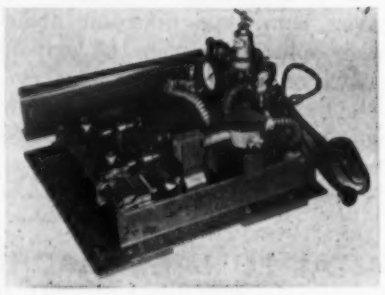
▲ For more details circle NED-5220 on enclosed inquiry slip ▲

PIPE FRICTION CALCULATOR aids in solving piping problems

The friction of varying quantities of fluids flowing in different size piping can be determined quickly with this Pipe Friction Head Loss computer. Losses can be obtained for liquids with viscosities ranging from that of water to 500,000 SSU. Size and horsepower of pumps required for handling various fluids through pipelines can be checked. List Price is $1. Available from **Foster Pump Works, Inc.,** 52 Washington St., Brooklyn 1, N. Y.

▲ For more details circle NED-5221 on enclosed inquiry slip ▲

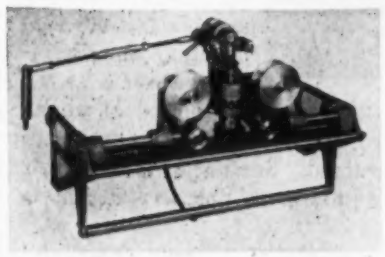
BAG IMPRINTING MACHINE applies serial number and code



Serial numbers as well as printed code identification are applied on top and bottom of multiwall paper bags by this air-operated automatic numbering machine. Length of imprint is up to 12 in., with numbers and letters available in ½, ¾ and 1-in. heights. Device is self-inking. (*Editor's Note: A description of this machine appeared on page* 15 *of the April* 1952 *issue with the illustration transposed with that of item below.*) Made by **Industrial Marking Equipment Co.,** Dept. NED, 454 Baltic St., Brooklyn 17, N. Y.

▲ For more details circle NED-5222 on enclosed inquiry slip ▲

WRAPPER CODING MACHINE attaches to packaging machinery



Cellophane, glassine, waxed paper, foil, tissue and other wrapping materials are coded automatically with this Rainbow Transleaf coding machine which attaches to packaging machinery. Custom built for continuous or intermittent types of machines, device uses heat and pressure to produce durable imprint in wide range of colors. (*Editor's Note: A description of this machine appeared on page* 67 *of the May* 1952 *issue with the illustration transposed with that of above item.*) *Made* by **Industrial Marking Equipment Co.,** Dept. NED, 454 Baltic St., Brooklyn 17, N. Y.

▲ For more details circle NED-5223 on enclosed inquiry slip ▲

MARK-TIME 9000-SERIES WALL TIME SWITCH
Time ranges from 3 minutes to 12 hours.
Rated at 20 ampere, 125 volt or 10 ampere, 250 volt, 1 HP operation. AC only.
Available for either ON type or OFF type operation.

mark-time wall time switch gives current saving convenience

Easily mounted in any standard rectangular wall box, this rugged, dependable Mark-Time time switch automatically controls the electrical circuit controlling attic fans, store window lights, hall and garage lights, farm lighting systems and neon signs, etc. . . .
Movements only are available for use in connection with home or factory heating control.
Write for further details and prices.

first where quality counts

MARK-TIME M. H. RHODES, INC.
HARTFORD, CONNECTICUT

In Canada send inquiries to: Ontario Hughes Owens Co. Ottawa, Ontario

▲ For more details circle NED-5224 on enclosed inquiry slip ▲

. . . by using Motch & Merryweather Triple-Chip Saw Blades!

In both the segmental type for larger work and the solid type for smaller work, Motch & Merryweather Triple-Chip Saw Blades give the same proven advantages: speed *and* accurate lengths *and* square, burrless ends with minimum scrap *and* long life *and* last low cost. 8" to 84" diameter . . . The top advantage: *Triple-Chip turns cuts into dollars.*

• *For advice and quick service, talk with your local Motch & Merryweather dealer.*

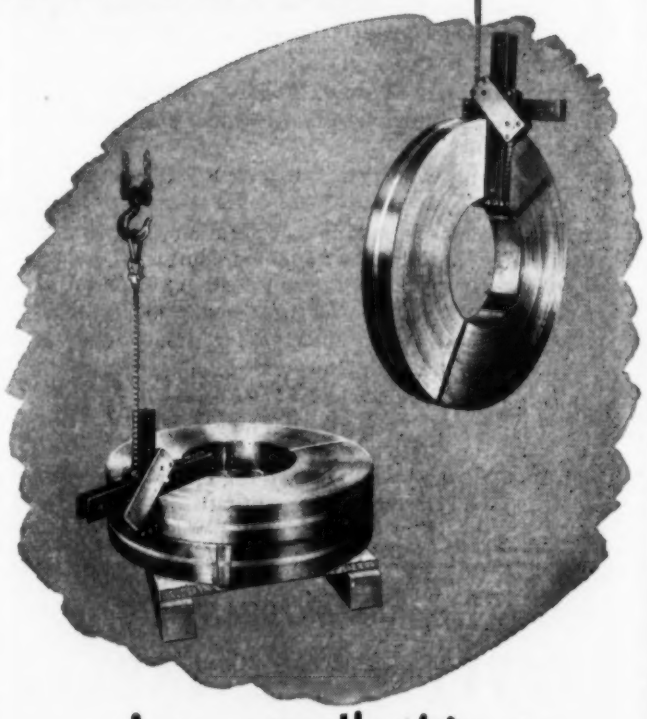
THE MOTCH & MERRYWEATHER MACHINERY CO.
PENTON BUILDING • CLEVELAND 13, OHIO
COMMAND OUR UNPARALLELED EXPERIENCE IN CIRCULAR SAWING

▲ For more details circle NED-5225 on enclosed inquiry slip ▲

DIXON

One Man Coil Grab

5,000LB. CAPACITY



Automatically Adjusts to Coil Size!

Coils can now be lifted from the pallet to a vertical position in one easy motion. A tapered prong fits between the coils in the space made by the coil bands. The opposite jaw is placed in the center of the coil. As the crane lifts the Dixon Grab automatically adjusts to the width, outside and inside dimensions of the coil and locks by its own weight as illustrated.

The Dixon Grab handles coils up to 5,000 lbs. The maximum opening is 13¼" from the I.D. to O.D. of the coil. It will handle coils up to 9¼" in width. Larger sizes are available on special order. See your dealer or write direct for full price information and catalog sheets.

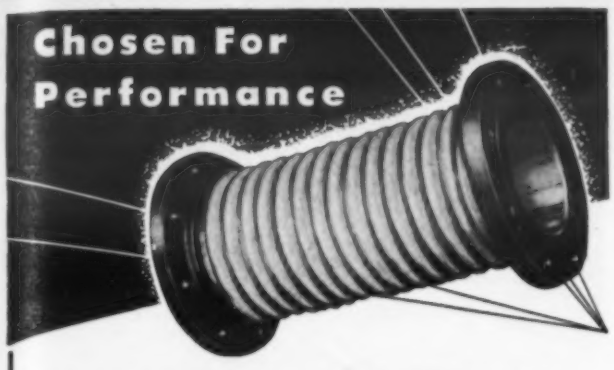
Dealer Inquiries are Invited

MATERIALS HANDLING DIVISION

DIXON RESEARCH INC.
2300 23rd AVE. • ROCKFORD, ILL.

▲ For more details circle NED-5226 on enclosed inquiry slip ▲

Chosen For Performance



Tremendous stamina is a "must" in flexible exhaust connectors . . . and Zallea Flexible Exhaust Connectors "have what it takes". That's why more diesel engineers choose Zallea over any other make. Construction is simplified . . . flexibility has been achieved at no sacrifice of durability . . . maintenance is eliminated . . . no seams or joints to open. Because of their great axial and lateral movement, bends may be made to a minimum radius of as little as 1½ times the diameter. Zallea Flexible Connectors are available in diameters from 3" to 72" with flanged or welding ends or a combination of both. Made of stainless to handle exhaust temperatures up to 1600° F. Want more facts? Write for Catalog 47 and Bulletin 351. Zallea Brothers, 818 Locust St., Wilmington 99, Delaware.

Zallea

For more details circle NED-5227 on enclosed inquiry slip

PUSH up production . . . PULL down costs
HEIN-WERNER PUSH and PULL "JacKit"

Pump operates at any angle . . . in any position!

If there's a job of pushing, pulling, bending or spreading to be done, a Hein-Werner "Push and Pull" Hydraulic Jack is a great time-and-labor saver.

The new Hein-Werner "Jackit" (C-12) includes the service-proven 10-ton "Push and Pull" Hydraulic Jack and basic attachments complete in sturdy wooden chest.

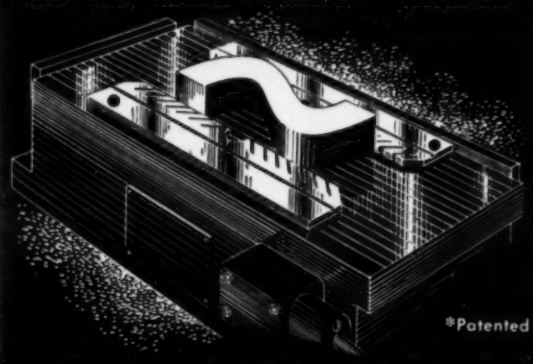
Available in models of 4, 10 and 20 tons capacity complete in wooden chest or rollaway metal stand. See your industrial supply distributor for details or write us.

Hein-Werner HYDRAULIC JACKS

HEIN-WERNER CORPORATION
Waukesha, Wis.

For more details circle NED-5228 on enclosed inquiry slip

HOLD BRASS GLASS ALUMINUM
. . . any rigid non-magnetic materials ON YOUR MAGNETIC CHUCKS!



*Patented

Magna-Vise* DOES IT!

For all the details . . . write Dept. ND62.

Hanchett MAGNA-LOCK CORPORATION
Magna-Lock
Magnetic Chucks and Devices
BIG RAPIDS • MICHIGAN, U. S. A.

For more details circle NED-5229 on enclosed inquiry slip

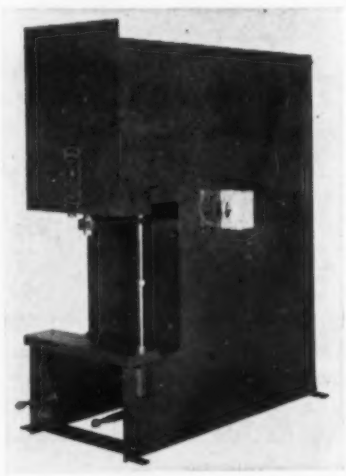
STAMPING & PARTS CONVEYOR
power driven unit maintains smooth flow of goods from production units

Light stampings, screw machine products, scrap and similar press room and machine shop material is handled smoothly by this Press-Veyor, Jr. Wheel-mounted for portability, this power driven unit speeds up plant operations by maintaining continuous flow of goods from production machines to tote boxes or to next operation. Head end can be raised or lowered to meet needs of application.

Conveyor is available in 4, 6 and 8-ft lengths and with 4, 8 and 12-in. belt widths for handling various sizes and types of products. Rigid 12-gage steel bed and guard rails are formed in one piece to prevent parts from catching or being damaged. Wide choice of belts includes woven cotton, Neoprene and waterproofed cotton belts with steel cleats on 24-in. centers. Standard belt speed is 55 fpm, but lower or higher speeds can be supplied. Choice of single or three-phase motors for 115-v or 220/440-v operation is offered. Made by **Rapids-Standard Co.**, Dept. LPV, 342 Rapistan Bldg., Grand Rapids 2, Mich.

For more details circle NED-5230 on enclosed inquiry slip

MOTORIZED HYDRAULIC PRESSES
made in ½, 1, 2 and 4-ton models



Gap type Junior motorized hydraulic presses have all-steel construction, two-way (pressure down-pressure up) operation and can perform forming, punching, drawing, broaching, marking, assembling, straightening, pressing and similar jobs. Self-contained bench models are practical for replacing kick and air presses, require little space, have finger tip control and adjustable length of stroke control. Presses are made in ½, 1 and 2-ton models powered by 1-hp 110-v ac 60-cycle motor and in a 4-ton model powered by 2-hp 220-v three-phase 60-cycle motor. All four models have 6-in. stroke, 10-in. daylight opening and 6-in. throat depth. Made by **Munton Mfg. Co.**, 9398 Belmont Ave., Franklin Park, Ill.

For more details circle NED-5231 on enclosed inquiry slip

THE ANSWER TO YOUR ROOFING PROBLEMS

Here's a ready source of tested built-up roofing specifications to meet every need. Ruberoid makes every type of built-up roof — Smooth-Surfaced Asbestos, Coal Tar Pitch with gravel or slag surfacing, and smooth or gravel-and-slag surfaced Asphalt. You'll find them all in this handy booklet.

A leader in the built-up roofing field for almost 60 years, Ruberoid can supply you with materials and specifications for any roofing condition through Ruberoid Approved Roofers. You are assured of efficient, economical service because Ruberoid Roofers are not prejudiced in favor of any one type.

Equipment and merchandise need the lasting protection that always comes in a Ruberoid Bonded Roof. Costly losses might be avoided by giving your roofing a thorough check-up now. Write for Ruberoid's free Built-Up Roofing Specification Book and Roof Selector. The Ruberoid Co., 500 Fifth Avenue, New York 36, N. Y.

The RUBEROID Co.
ASPHALT AND ASBESTOS BUILDING MATERIALS

For more details circle NED-5232 on enclosed inquiry slip

FOR FASTER, SAFER WELDING

Use Hewitt-Robins Twin-Weld— 2 Hoses Molded on 1 Line

Speeds Welding: In patented Twin-Weld®, both a green oxygen and red acetylene line are molded in one compact, flexible, easy-to-handle unit. Ideal for use in close-quarter work.

Stops Tangling: Eliminates dangerous tangle of two separate hoses—won't kink—makes welding jobs safer.

Get The Whole Story: Call your Hewitt Rubber Distributor (see classified phone book) or write for Bulletin H-4.

HEWITT-ROBINS HR INCORPORATED
Stamford, Connecticut

For more details circle NED-5233 on enclosed inquiry slip

Bendix automotive Electric Fuel Pump

Unmatched for
LONG LIFE and RELIABILITY

Dependable as no Fuel Pump has ever been *under all operating conditions*

Performance Proven. Years of research, development, and rigorous tests have been made on this pump.

Longer Life—No Pressure Drop. No bearings or levers to wear; no diaphragm to fatigue.

Delivers More Gallons Per Hour. Can deliver more than 30 gallons output per hour. Two or more pumps can be manifolded.

Economical Operation. Low original cost and *long dependable life* make this fuel pump the best buy on the market.

Improves Low Temperature Starting. Tests prove that engines start at 10 to 15 degrees lower with the Bendix Fuel Pump.

Eliminates Vapor Lock. Assures a constant, dependable supply of fuel in the hottest weather.

Low Power Requirements. Only 7 watts at maximum fuel delivery.

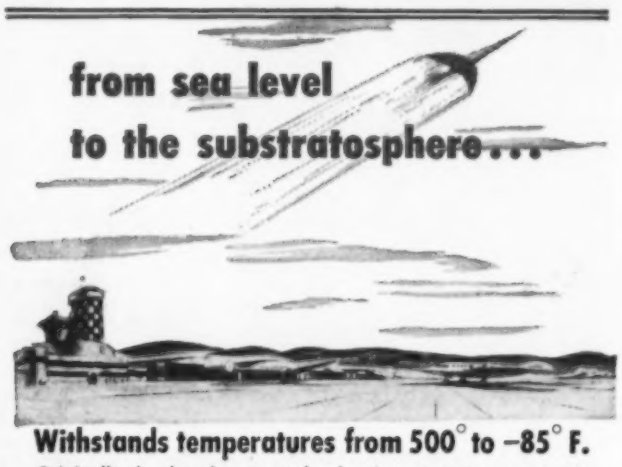
Dependable Operation at 75° Below Zero. That's why the U. S. Army Ordnance Corps chose it to pump fuel to heaters in the extreme cold of the Arctic.

Easy to Install—Easy to Service—Tamper-Proof. Simple two-bolt mounting. No adjustments. Electrical system, sealed *in helium*, insures longest possible life.

Light Weight—Compact. A giant in output but a midget in weight—one pound, thirteen ounces.

WRITE TO
Eclipse Machine Division
Elmira, New York · Division of Bendix Aviation Corporation

For more details circle NED-5234 on enclosed inquiry slip



Withstands temperatures from 500° to −85° F.

Originally developed to meet the drastic temperature range aircraft encounter, Varglas Silicone Electrical Tubing and Sleeving may be able to lick your tough insulation problems! Here's why: Varglas Silicone is . . .

- **Efficient at 500° F.** — flexible at −85°F.
- **Moisture-Resistant** — to lubricating oil, salt water, acids and mild alkalis.
- **Fire-Resistant** — non-flaming in nature.
- **Abrasion-Resistant** — pliable and non-fraying.
- **Dielectrically Strong** — average readings up to 7,000 volts.

Available in various NEMA colors in several types and grades of tubing, sleeving, lead wire and tying cord.

VARFLEX *Sales Co., Inc.*
310 N. Jay St., Rome, N. Y.

For more details circle NED-5235 on enclosed inquiry slip

What he needs is **W.I.M.***

ULLMAN PRODUCTS CORPORATION SPECIALISTS IN

Work Inspection Mirrors

ULLMAN BUILDING, DEPT.NED • BROOKLYN 15, NEW YORK

For more details circle NED-5236 on enclosed inquiry slip

you can cut carrying costs!

This new booklet on Conveyor Chains and Attachments is packed with photographs, sketches and descriptions of how chain conveyors can cut your materials handling costs. Designed as a "thought provoker" for anyone concerned with materials movement, it covers all major types of chain conveyors, handling everything from bulk material to oil drums to tiny lenses.

We feel sure you'll find this book both interesting and valuable. Just mail the coupon.

CHAIN BELT REX COMPANY

Chain Belt Company
4686 W. Greenfield Ave.
Milwaukee 1, Wis.

50-133

Gentlemen: Please send me Bulletin 50-35.

Name.....

Company.....Dept.....

Address.....

City.....State.....

For more details circle NED-5237 on enclosed inquiry slip

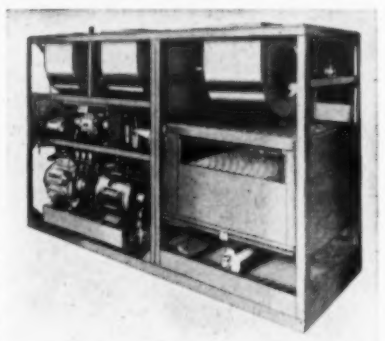
WAX DIP-COATING TANKS
thermostatic control and hollow wall assure even heat distribution

Protective wax or plastic coating materials as well as insulating compounds are maintained in ready-to-use condition for dip application by Ramco wax dipping units. All feature hollow double-wall construction or air jacket which assures uniform heating of compound and prevents "hot spots" or flash fires. Heavy insulated metal lid is held open by chain with fusible link which closes lid automatically in the event of fire. Thermostat, magnetic contactor, safety switch and junction box are mounted on side of outer shell and are protected by drip guard.

Five models are available with capacities of 30 to 180 gallons. They all operate on 220-v current and draw from 3 to 12 kw, depending upon size. Shock-proof thermostat is infinitely variable within range of 100° F to 550° F. Pilot indicator light shows when current is on. All component parts are Underwriters' Laboratory approved. Made by **Randall Mfg. Co.**, 803 Edgewater Rd., New York 59, N. Y.

For more details circle NED-5238 on enclosed inquiry slip

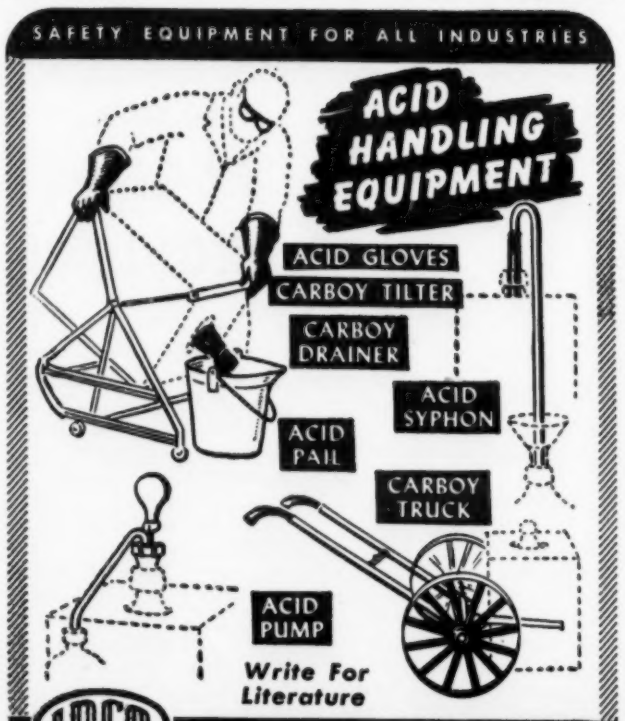
AIR CONDITIONERS
have water saving features



Integral evaporative condensers incorporated in line of medium tonnage self-contained air conditioners allows equipment to meet stringent municipal regulations on water consumption and disposal. Units are produced in 15 and 20-ton capacities to supply year-round requirements for conditioned air delivered through ducts. Compressor, evaporative condenser and air conditioner assemblies are grouped in a single compact cabinet, shipped completely wired, piped, dehydrated, charged and tested for operating conditions specified for each individual job. Moisture condensed from the atmosphere by the unit's cooling coil is added to the spray water in the condenser, thereby reducing overall water consumption by as much as 98 per cent on humid days. Model is suited for use in locations where water is scarce or temperature is abnormally high. Made by **Trane Co.**, 2018 Cameron Ave., La Crosse, Wis.

For more details circle NED-5239 on enclosed inquiry slip

SAFETY EQUIPMENT FOR ALL INDUSTRIES



IPCO *Safety Equipment for all Industries*

INDUSTRIAL PRODUCTS COMPANY

2807 N. FOURTH STREET • PHILADELPHIA 33, PA.

For more details circle NED-5240 on enclosed inquiry slip

First and Only! **Pocket Comparator**

Saves time and money inspecting small dimensions . . .

Nothing else like it! A precision optical measuring instrument for fast, accurate inspection of small dimensions. Save time and money measuring wear on cutting tools, checking forms and dimensions of punches, dies and gauges—as well as radii, angles, chamfers, threads and small holes on production parts.

PRICE **$36.00**
ORDER TODAY

A product of **BELL & HOWELL CO.** Distributed by

See Your National Tool Co. Representative or Local Jobber

NATIONAL TOOL CO.

11210 Madison Avenue Cleveland 2, Ohio

Write for **FREE** descriptive folder

For more details circle NED-5241 on enclosed inquiry slip

Pangborn "EZ" Hydro-Finish paid for itself in three months at Benedict-Miller, Newark, New Jersey.

Checking with micrometer proves Hydro-Finish can hold tolerances as close as .0001".

"EZ" DOES IT!*

***At Benedict-Miller,**
PANGBORN "EZ" Hydro-Finish® Cabinet

- **Saves Labor!**
- **Gives Better Surfaces!**
- **Increases Business!**
- **Saves Money!**

"EZ does it," says Robert M. Bloss, General Manager at Benedict-Miller of Newark, N. J. "In fact, our EZ Hydro-Finish does a lot more than we ever figured it could!"

Take one case in particular—cleaning the inside surfaces of doll head molds. From a required hand cleaning time of three hours per mold, Hydro-Finish stepped up production to 80 in five hours—a labor saving of well over $200 on this job alone!

Heat treat scale was previously removed by pickling. But after trying Hydro-Finish, the report was: "Besides all the extra costs and trouble, an acid pickling surface just can't compare with a Hydro-Finish surface." On some items, Benedict-Miller's heat treat business was actually *doubled*, as customers learned about the amazing finish B-M (and EZ) turned out!

It all adds up to better quality, faster production, and increased profits for Benedict-Miller and its customers. Learn how Pangborn can do this for you, too. Write today for Bulletin 1400-A. Address: PANGBORN CORP., 2400 Pangborn Blvd., Hagerstown, Maryland.

Pangborn

Look to Pangborn for the latest developments in Blast Cleaning and Dust Control equipment

BLAST CLEANS CHEAPER
with the right equipment for every job

For more details circle NED-5242 on enclosed inquiry slip

Save Installation Time!

SPECIFY AN ALLIS-CHALMERS COMBINATION STARTER

WHEN YOU NEED both a magnetic starter and the protection of a safety switch, a neat installation can be made quickly with an Allis-Chalmers circuit breaker type combination starter. Starter and switch are factory assembled and wired in a single enclosure to save you installation time and space.

You get a starter that has long-lasting contacts, non-carbonizing arc chambers and easily accessible parts. The circuit breaker gives short circuit protection . . . serves as a disconnect switch.

Combination starters are available in sizes 0 through 5 for motors from fractional to 200 hp, 110-550 volts.

Remember, there is an Allis-Chalmers starter for every motor need. All are designed and constructed for long life, easy inspection, speedy installation. Bulletin 14B7132 describes manual, magnetic, combination, and reversing starters for 110-550 volt motors. Contact your nearby A-C representative, or write Allis-Chalmers, Milwaukee 1, Wisconsin. A-3715

ALLIS-CHALMERS

For more details circle **NED-5243** on enclosed inquiry slip

OILTIGHT PUSHBUTTONS
feature building block design for special and standard uses

Building block construction of line of oiltight pushbutton units for machine tools permits application flexibility as basic units can be arranged in various combinations to meet special and standard requirements. Coding of units is accomplished by screwing colored rings on the neutral-colored button. Double-break contacts are self-aligning.

Basic form of contact block is single-pole, double-throw type. Double-pole, double-throw combinations are made by mounting two units on same base. Up to four normally-open and normally-closed contacts can be made by combining four blocks with an adapter plate. Various operator types are available. Enclosures, offered with 1, 2, 3, 4, 6 and 9-button stations, are fully oiltight and meet JIC specifications. Contacts are rated at 115, 230, 460 and 575 v. Made by **General Electric Co.,** Schenectady 5, N. Y.

For more details circle **NED-5246** on enclosed inquiry slip

FLOOR CONDUCTIVITY METER
checks electrical resistance or static charge potentials

Battery powered, pushbutton operated Vibrotest model 267 is instrument developed to measure electrical resistance of conductive flooring in accordance with National Fire Protection Association bulletin 56. Uses include testing floors for static charges or stray electrical potentials; determining changes in floor conductivity caused by wear, washing, waxing, or presence of grease, iron filings, dirt, etc; and measuring electrical insulation resistance, as well as making wire continuity and voltage checks.

Instrument has ranges of 0-20 megohms at 125-dc test potential, 2-200 megohms at 500-v dc test potential and 0.20,000 ohms at 150-300-600-v ac and dc. It is housed in 12¼ x 9 x 10-in. welded steel case and includes two 5-lb measuring electrodes with pairs of 5 and 10-ft test leads. Made by **Associated Research, Inc.,** 3786 W. Belmont Ave., Chicago 18, Ill.

For more details circle **NED-5247** on enclosed inquiry slip

Even when you specify such phenomenally long life gear sets as Cone-Drive double enveloping gearing, it helps to know that if you ever need replacements you can get them —*from stock!*

Make sure of that by specifying *STANDARD* Cone-Drive gear sets and reducers.

They will also give you these "plus" advantages:

- **Smaller center distances**
- **Up to 2/3 less weight**
- **More teeth in contact**
- **Lower overall cost**

STANDARD Cone-Drive gear sets come in ratios from 5/1 to 70/1; will handle loads from fractional to over 800 hp. Write for specifications.

CONE-DRIVE GEARS
DOUBLE ENVELOPING GEAR SETS & SPEED REDUCERS
Division, Michigan Tool Company
7171 E. McNichols Road • Detroit 12, Michigan

For more details circle **NED-5249** on enclosed inquiry slip

Klixon Thermo-Snap controls are widely used as temperature controls, low-limit and high-limit controls, fuel delay switches, purge switches, fan switches, tube and rectifier cooling controls in many military and civilian products.

Actuated by the simple, snap-acting "Spencer Disc," their snap-action opens the circuit with a quick, clean break . . . closes the circuit to a solid make. Their accurate operation is best able to withstand shock, vibration, altitude or motion.

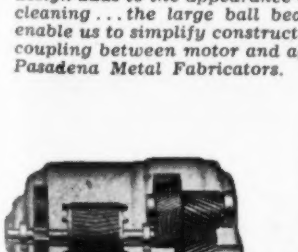
Klixon Thermo-Snap Controls are available in many hermetically sealed and open types in a wide variety of operating temperature ranges. They provide accurate temperature control wherever used . . . and usually at a cost lower than general purpose controls. Our engineers will gladly help you with your problems. Write for information, today.

SPENCER THERMOSTAT
Division of Metals & Controls Corp.
1906 FOREST ST., ATTLEBORO, MASS.
KLIXON

For more details circle **NED-5244** on enclosed inquiry slip

FOOD MACHINERY MFR. SELECTS SLO-SPEED

We use vertical, face mounted Slo-Speeds to drive the agitators on our 1000-gallon tanks for blending ice cream mix. Slo-Speeds' positive oil seals prevent leakage . . . their streamlined design adds to the appearance of our equipment and simplifies cleaning . . . the large ball bearings which take heavy loads enable us to simplify construction by permitting use of a rigid coupling between motor and agitator, reports Mr. Manning of Pasadena Metal Fabricators.



70 ILLUSTRATIONS showing how Sterling Electric Power Drives reduce production costs. Write for Bulletin No. D-128.

STERLING SLO-SPEED OUTSTANDING FEATURES:

Simplified gear system—balanced design—compact—rugged — highly efficient — abundant lubrication—low output shaft—positive oil seals — Herringbone Rotor — protected — streamlined — direct through ventilation — quiet operation — AGMA speeds — extremely long life — every unit will operate in any position.

STERLING ELECTRIC MOTORS

Plants: New York City 51; Van Wert, Ohio; Los Angeles 22; Hamilton, Canada; Santiago, Chile. • Offices and distributors in all principal cities.

For more details circle **NED-5245** on enclosed inquiry slip

READ HOW TO CUT YOUR SMALL PARTS FINISHING COSTS

Norton Company's new, illustrated booklet contains 55 pages of latest facts on the most modern and efficient method of finishing small parts.

See how you can deburr, remove scale and flash, and produce surface finishes and radii to blueprint specifications — faster, and at lowest unit cost. Read how Norton ALUNDUM* abrasive helps shorten tumbling cycles, reduce scrap and reworking, and give consistently better finish.

Partial list of subjects includes types of equipment . . . cleaners . . . rust preventives . . . step-by-step description of tumbling process . . . rescreening of abrasive . . . mixing of parts.

Ask your Norton distributor or representative for this valuable handbook, or write direct for Form 501.

NORTON COMPANY
Worcester 6, Mass.
Distributors in all principal cities
*Trade-Mark Reg. U. S. Pat. Off. and Foreign Countries.

NORTON ABRASIVES
Making better products to make other products better

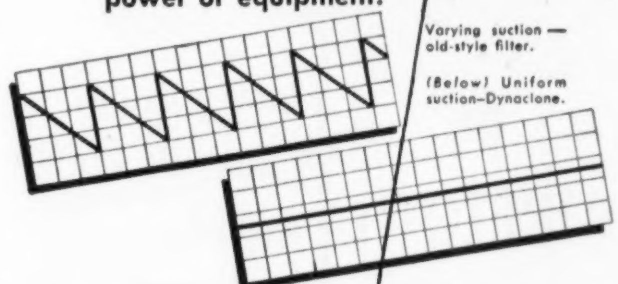
For more details circle **NED-5248** on enclosed inquiry slip

NEW... Cloth Screen Dust Filter
SLY DYNACLONE*

Offers 5 NEW Advantages

You saw this ad 2 years ago

1. Eliminates mechanical shaking.
2. Provides uniform suction at dust source.
3. Assures longer bag life . . .
4. Minimum maintenance.
5. Keeps itself automatically and continuously clean without additional power or equipment.



This revolutionary new dust filter is another Sly first. Extremely simple and thoroughly dependable, it eliminates entirely the gremlin of mechanical shaking and provides uniform suction of air at dust source.

This uniform suction is achieved by a simple device which cleans the filter bags successively by a reverse flow of air — the same suction which draws the dust onto the filter cloth is reversed to blow it off.

Since this reverse air suction operates continually, the new Sly Filter requires no shutdowns for removing dust from the cloth.

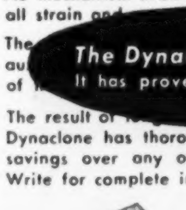
No mechanical shaking or flexing device is needed, eliminating all strain and

The ... all au... ing of ...

The Dynaclone isn't NEW any more!
It has proven its merits in many industries.

The result of ... tests, the Sly Dynaclone has thoroughly proved itself. It provides substantial savings over any other type of cloth screen dust collection. Write for complete information.

*PATENTED



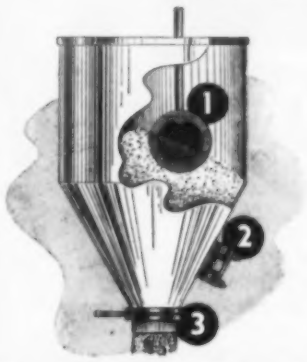
Send for descriptive bulletin just out on the new Sly Dynaclone — the ultimate in filter performance.

PIONEERS AND LEADERS IN INDUSTRIAL DUST CONTROL

THE W. W. SLY MANUFACTURING CO.
4748 TRAIN AVENUE • CLEVELAND 2, OHIO
NEW YORK • CHICAGO • PHILADELPHIA • SYRACUSE
DETROIT • BUFFALO • CINCINNATI • ST. LOUIS
INDIANAPOLIS • BIRMINGHAM • LOS ANGELES • TORONTO

For more details circle **NED-5250** on enclosed inquiry slip

for Complete Hopper Efficiency
SYNTRON



1. Hopper Level Switches

Eliminate spillage and shortage of materials. Automatically maintain desired levels of materials—from fine to coarse—in bins and hoppers. Control feeding.

2. Electric Vibrators

Assure free-flowing bins, hoppers and chutes. Eliminate arching and plugging of materials without hammering and rodding that damages equipment and wastes manpower.

3. Flow Control Valves

Control flow of bulk materials from bins, hoppers and chutes. Rotating control lever increases or decreases opening of flexible iris type diaphragm and flow of material without jamming or clogging.

Write for FREE Illustrated Folders

SYNTRON CO.
405 Lexington Ave. Homer City, Pa.

▲ For more details circle NED-5251 on enclosed inquiry slip ▲

NEW METHOD FOUND!

to protect tube cleaners from effects of acids

now provides CADMIUM PLATED cleaning equipment

AIRETOOL

Here's welcome news for industrial plants whose tubes and pipes handle acids that corrode tube cleaning equipment. AIRETOOL is, now, providing Cadmium plated tube cleaners which resist corrosion due to acid conditions encountered when removing scale deposits from tubes.

This development gives added life and usefulness to tube cleaning equipment at very little cost. For particulars write immediately to The AIRETOOL Mfg. Co., 308 S. Center St., Springfield, Ohio.

Cleaning and expanding equipment of all types furnished Cadmium plated if desired.

AIRETOOL
MANUFACTURING COMPANY
SPRINGFIELD, OHIO

BRANCH OFFICES: New York, Philadelphia, Chicago, Tulsa, Baton Rouge, Houston

REPRESENTATIVES in Principal Cities of U.S.A., Canada, Mexico, South America, England

There's an AIRETOOL Tube Cleaner and Tube Expander for Every Type of Tubular Construction

▲ For more details circle NED-5252 on enclosed inquiry slip ▲

AUTOMATIC PREFORM PRESS for high bulk factor materials

Hydraulic operating pressure for model 60 automatic preform press for making uniform preforms from high bulk factor materials is supplied by two self-contained Vickers vane pumps and accumulator. Valves are solenoid operated with either limit or pressure switches for control. High production unit has 4-in. maximum preform diameter; 2-in. maximum core rod diameter; six to 10 strokes per minute, depending upon pressure dwell; main pressing ram of 40 tons; and high and low working pressures of 1000 and 350 psi, respectively. Automatic feeder includes storage bin, conveyor, agitator, scale and collector chamber. Press and feeder are interlocked so that each step of weighing, filling, pressing and ejection occurs automatically in sequence. Made by **Baldwin-Lima-Hamilton Corp.**, Dept. T. E., Philadelphia 42, Pa.

▲ For more details circle NED-5253 on enclosed inquiry slip ▲

PORTABLE WELDER-BRAZER has equipment for grinding, buffing, sanding, brushing and sawing

Compact Porto-Weld heavy duty welding and brazing unit has built-in power equipment for grinding, buffing, polishing, sanding, brushing or sawing. Unit consists of two parallel and slightly staggered cylinders measuring 12 in. long and 6 in. diameter, mounted on a handle-equipped 13½ x 15-in. base. General Electric motor-generator is ball bearing equipped, requires no oiling and has balanced rotor. Operation is on 110 v, 60 cycles ac-dc. Speeds range from 2000 to 10,000 rpm and amperage from 0 to 150.

Eight welding ranges accommodate ½-in. steel and up to 5/32-in. rod. Open circuit 60 v dc permits deep penetration welding. Welder also has reverse polarity. Model 2-A unit costs $98.50 and is offered with cart for $104.75. Various accessories are offered. Available from **Generator Sales Co.**, 1627-33 N. Damen Ave., Chicago 47, Ill.

▲ For more details circle NED-5254 on enclosed inquiry slip ▲

For Safety's Sake Use DAYTON SAFETY LADDERS

Maintenance men everywhere rely on Dayton Safety Ladders for maximum safety and convenience. Daytons are constructed of tested airplane spruce and reinforced with rigid steel supports to give great strength and lightness of weight.

Handrails of steel guard the large roomy platform for added safety. Half of platform can be raised to form an extra step, when needed. These famous ladders can be set up instantly, are easy to carry and fold compactly for storing. Automatic locking feature insures safety while ladder is in use.

Sizes 3 feet to 16 feet in height (measured from ground to platform) with standard rubber safety shoes at no extra cost.

Write Dept. E for bulletin

DAYTON SAFETY LADDER CO.
2339 GILBERT AVE. CINCINNATI, OHIO
In Canada—Safety Supply Company—Toronto

▲ For more details circle NED-5255 on enclosed inquiry slip ▲

AT YOUR SERVICE

2 NEW Shenango bulletins

. . . on symmetrical or annular parts, ferrous and non-ferrous

FIND out about the many advantages and savings you stand to gain with Shenango centrifugally cast parts.

BULLETIN NO. 150 covers non-ferrous parts in manganese and aluminum bronzes, red bronzes, brass, Monel Metal and special alloys.

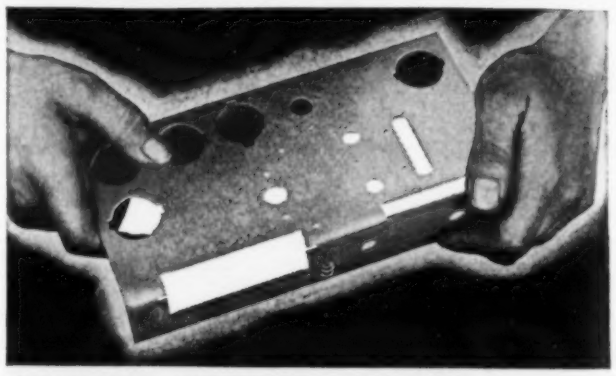
BULLETIN NO. 151 covers parts of Meehanite Metal, Ni-Resist and special iron alloys.

Either or both bulletins are yours for the asking.

SHENANGO-PENN MOLD COMPANY
Centrifugal Castings Division
Dover, Ohio
Executive Offices: Pittsburgh, Pa.

SHENANGO
ALL RED BRONZES • MANGANESE BRONZES • ALUMINUM BRONZES
MONEL METAL • NI-RESIST • MEEHANITE METAL

▲ For more details circle NED-5256 on enclosed inquiry slip ▲



COPPER-PLATED PARTS STAY BRIGHT AND CLEAN

when Coated with WATER DIP #33

Here's a simple, low-cost finish that keeps copper-plated surfaces bright, free from fingerprints, chemically clean. It's M & W Water Dip #33. Work goes directly from the last hot water rinse into Water Dip #33—no need for rehandling and drying!

For the complete story on Water Dip #33, write for Bulletin #117, or let our M & W technical consultant discuss your requirements privately with you.

PIONEERS IN PROTECTION

MAAS & WALDSTEIN CO. 438 RIVERSIDE AVE. NEWARK 4, N. J.
Midwest Div.: 1658 Carroll Ave., Chicago 12, Ill. • Pacific Coast Div.: Smith-Davis Co., 10751 Venice Blvd., Los Angeles 34, Cal.
MANUFACTURERS OF INDUSTRIAL FINISHES

▲ For more details circle NED-5257 on enclosed inquiry slip ▲

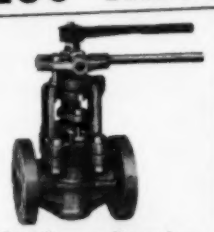
WE MAKE *ALL* TYPES OF PLUG VALVES

For ALL Kinds of Services
In the Right Metals for Your Needs

HOMESTEAD Lever-Seald *Quarter-Turn* PLUG VALVES

HOMESTEAD CAM-SEALD

Straight-way—Flanged or Screw Ends



Straight-way—Flanged or Screw Ends

HOMESTEAD-REISER

Straight-way—Flanged or Screw Ends

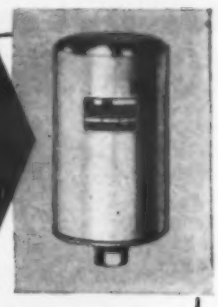
End valve-operating difficulties on high temperature, pressure and corrosive services, and on jobs where lubricant would contaminate process fluids, by installing Homestead Lever-Seald Valves. They are stick-proof, because a *built-in* lever and screw device assures positive action at all times, under all conditions. Homestead Lever-Seald Valves are available in straight-way, three-way, and four-way types, with screwed or flanged connections; in Semi-Steel, Steel, Ni-Resist, Stainless Steel, Monel, or other alloys; sizes 1" to 10"; for vacuum to 1500 lbs., and for temperatures from 40° below zero to 1100° F. Valve Reference Book No. 39-3 on request.

HOMESTEAD VALVE MANUFACTURING COMPANY
"Serving Since 1892"

P. O. BOX 84 CORAOPOLIS, PA.

▲ For more details circle NED-5258 on enclosed inquiry slip ▲

SENSITIVE, PRECISE PRESSURE-VACUUM CONTROLS



TYPE G9

The pressure vacuum control illustrated is an accurate, highly sensitive, precision-built unit. It may be had with an internal or external, calibrated or uncalibrated adjustment. It is watertight unless the adjustment is external.

It is designed for applications requiring constant repeatability of any on-off differential between .2" and 10" w.c. For full details send for bulletin #5-1.

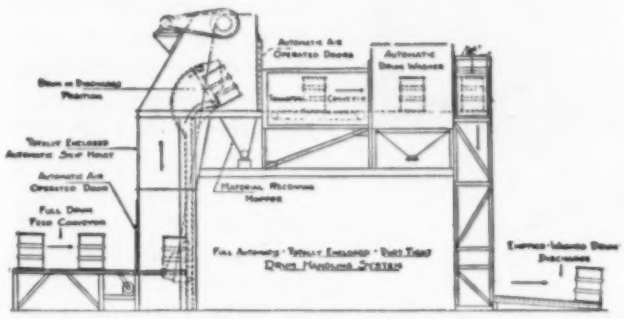
UNITED ELECTRIC CONTROLS COMPANY
81 School Street, Watertown, Mass.

STANDARD & SPECIAL THERMOSTATS & PRESSURE SWITCHES

For more details circle NED-5259 on enclosed inquiry slip

DRUM EMPTYING CONVEYOR
automatic unit washes empty drums

Up to 40 drums per hour can be emptied by fully automatic conveyor system which eliminates manual lifting, cuts work hours and washes emptied drums.



System has four principal units: totally enclosed automatic skip hoist, transfer conveyor, automatic drum washer and drum lowering device. Full drums are moved from roller conveyor into hoist enclosure by an air-operated pusher. Either 30 or 50-gallon drums can be handled, emptying their contents through a grating into a receiving hopper after being lifted. They then drop on vibrating grating which dislodges any remaining material. Washer cleans drums inside and out and blows them dry. Entire system is dust and watertight. Made by **Gifford-Wood Co.**, Hudson, N. Y.

For more details circle NED-5262 on enclosed inquiry slip

The Portable MORSE ROTATOR

THE NEWEST ADDITION TO 25 YEARS OF SUCCESSFUL MANUFACTURING EXPERIENCE

SAVES TIME! SAVES LABOR! MODEL 500
SAFELY ROTATES UP TO 500 LBS. AT 10, 20 OR 40 RPM

A powerful, compact motorized unit that will cut costs of mixing, tumbling, cleaning, etc. Scientifically engineered for smooth, safe revolving. Can be loaded by ONE MAN and is easily moved. The power drive has a ¾" dia. shaft and is equipped with self-aligning bearings. Four 4" dia. Neoprene drive wheels adjustable to take from 1 to 55 gal. cylindrical containers. Wt. before crating 137 lbs. Furnished with motor and gear reduction unit. *Write For Complete Information.*

MORSE MANUFACTURING CO., INC.
127 Dickerson Street Syracuse 2, N. Y.

For more details circle NED-5265 on enclosed inquiry slip

NO OTHER OIL HYDRAULICS PERFORM LIKE "COMMERCIAL" OIL HYDRAULICS

Operating pressures recommended up to 1500 p.s.i.

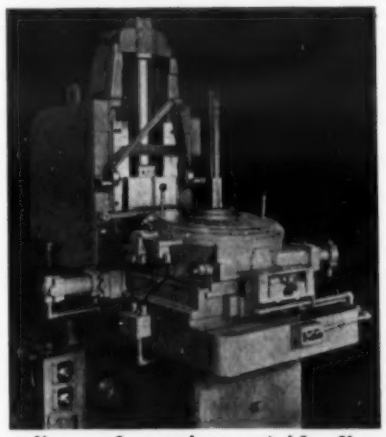
CATALOG H-6 AVAILABLE ON REQUEST

THE COMMERCIAL SHEARING AND STAMPING CO.
YOUNGSTOWN 1, OHIO

"COMMERCIAL"

For more details circle NED-5260 on enclosed inquiry slip

BROACHING MACHINE
makes angular straight-sided splines



Production of accurate tapered splines on different sizes of parts by broaching process is possible with this 15-ton, 66-in. stroke pull-down broaching machine equipped with special table and adjustable short shuttle travel. Machine illustrated produces several sizes of angular straight-sided splines of varying outside diameters. Part is placed over the broach tower on a fixture plate with the broach in the down position. Angle of the plate is made so that the broach, which travels vertically, will produce splines with correct amount of taper. Parts are held in position with holddown studs and strap clamp. Entire operation is automatic. Parts up to 42 in. OD can be broached, fixture plates being changed to suit various parts. Made by **Colonial Broach Co.**, P. O. Box 37, Harper Station, Detroit 13, Mich.

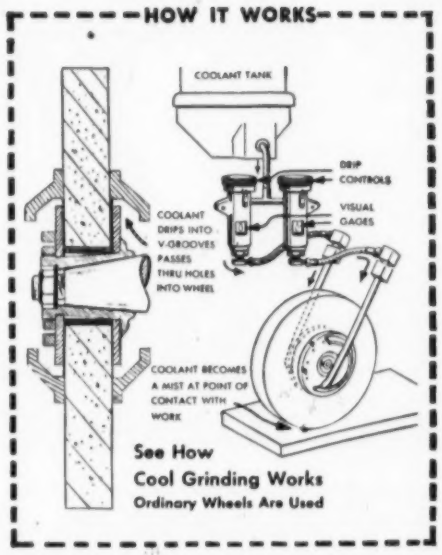
For more details circle NED-5263 on enclosed inquiry slip

DoALL "COOL GRINDING"

COOLANT FLOWS THROUGH THE WHEEL

•

FASTER SURFACE GRINDING AND GREATER ACCURACY WITHOUT BURNING



In DoALL "COOL GRINDING" coolant flows *into* and *through* the wheel and out at point of contact in a fine mist. Every cutting particle is surrounded by coolant. *Standard wheels are used.*

DoALL Precision Surface Grinders with "Cool Grinding" for toolroom or production work give amazing results in terms of time, labor savings and material savings, greater precision, longer wheel life, longer tool and die life between grinds.

You can see for yourself—ask to have a FREE DEMONSTRATION in your own plant on your own work. Call your local DoALL Sales-Service Store or write: The DoALL Company, 254 N. Laurel Ave., Des Plaines, Ill.

SEND FOR CATALOG . . . *describes "Cool Grinding" and the complete line of DoALL Precision Grinders. Write today.*

35 SALES-SERVICE STORES

DoALL

INDUSTRY'S NEW TOOLS

CR-3R

For more details circle NED-5266 on enclosed inquiry slip

HOT PROBLEM? move it on a Simplicity conveyor

If you move hot, abrasive materials in your operations, you'll do it faster and more economically with either a Simplicity Os-A-Veyor (oscillating type conveyor) or a Model PT Positive Action Conveyor. Simplicitys are ruggedly built for tough duty. Simple power units and operating mechanism mean low maintenance costs and easy servicing. Model PT conveyors, built in lengths of 100', can be installed in multiples to meet any level-operation requirement. Os-A-Veyor types, available in lengths to 30' and 12" to 6' widths, will operate on an incline depending on product being handled. Simplicity conveyors give positive rate of feed control and handle all kinds of material, regardless of temperature and abrasive characteristics, without damage. Write, wire, or phone . . . today.

92

Simplicity
ENGINEERING CO., DURAND, MICH.

For more details circle NED-5261 on enclosed inquiry slip

"it's easy to bend"

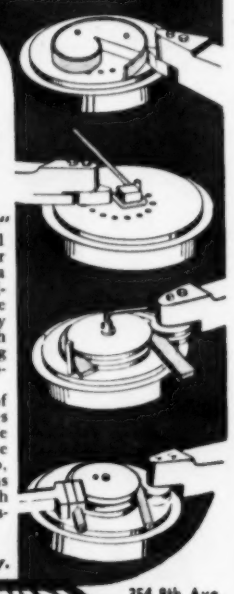
a new practical 32 Page di-acro BENDING MANUAL

by the originators of "Die-less Duplicating"

This instructive and authoritative booklet will quickly prove itself indispensable wherever bending is done or is needed. It brings you a veritable gold mine of tested, authentic bending methods applicable to any rotary type bender. The proper bending technique may frequently offer a new approach to an old problem by simplifying product design and cutting production costs.

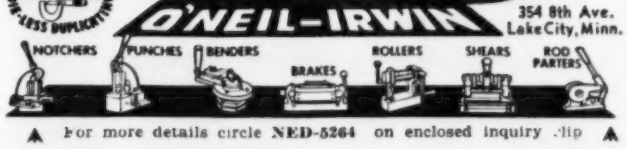
The exact methods of producing various types of bends in a wide range of materials are illustrated, step by step, with over 90 diagrams and charts together with valuable tooling suggestions.

You'll want a copy . . . Mail your request today.



DI-ACRO PRECISION MACHINES DIE-LESS DUPLICATING

O'NEIL-IRWIN 354 8th Ave. Lake City, Minn.



For more details circle NED-5264 on enclosed inquiry slip

How to measure a folding rule—

Compare a Stanley "Green End" with any other folding rule. See how much more real rule value there is in a rule that has "Green Ends". Famous Stanley "Zig-Zag", "Pull-Push" and Boxwood rules are available in a wide variety of styles, sizes and markings for every industrial need. Call your distributor.

Stanley Tools, New Britain, Conn.

THE TOOL BOX OF THE WORLD **STANLEY**

Reg. U.S. Pat. Off.

HARDWARE • TOOLS • ELECTRIC TOOLS • STEEL STRAPPING • STEEL

For more details circle NED-5269 on enclosed inquiry slip

. . . that's why I buy

BUFFALO CONVEYOR BELTS

"My father always said that 'the things that last you the longest cost you the least'. You know I'm often accused of being a little conservative but that good old fashioned advice has served me pretty well. We always buy the best for our plant if it will give us longer service. The wonderful part of these Buffalo Belts is that they don't cost a cent more than those other belts."

Here is another typical customer reaction to these better Buffalo Conveyor Belts. These solid woven cotton belts are MADE TOUGHER by taking the strongest cotton yarn available and WEAVING IT TIGHTER with our exclusive WOV-IN-WEAR process. From more than 50 years of experience, we've found out how to weave under HIGHER TENSION to produce a belt that always LASTS LONGER. Would YOU like some good old fashioned proof of a product's superiority? Ask your mill supply jobber or write us direct. Buffalo Belts are available in over 200 sizes, 35 widths, 7 thicknesses and 7 special surface treatments.

Send for Free Folder

14 illustrated pages of sizes, types and prices

BUFFALO WEAVING & BELTING COMPANY
709 CHANDLER STREET BUFFALO 7, NEW YORK
NEW YORK PHILADELPHIA CHICAGO DETROIT SAN FRANCISCO

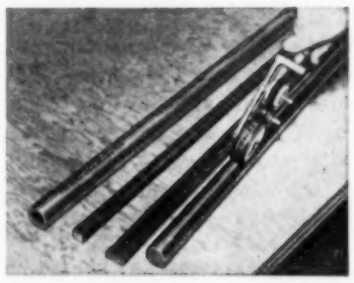
For more details circle NED-5270 on enclosed inquiry slip

FOLDING STEEL CHAIR
usable indoors or out-of-doors

Light in weight and of compact folding design, this Indoor-Outdoor chair has curved back to fit body; wide, roomy, perforated seat; strong channel steel frame and non-skid rubber feet to prevent slipping or marking of floors. Chairs are finished in durable walnut or taupe baked-on enamel. Made by **Lyon Metal Products, Inc.,** 324 Clark St., Aurora, Ill.

For more details circle NED-5271 on enclosed inquiry slip

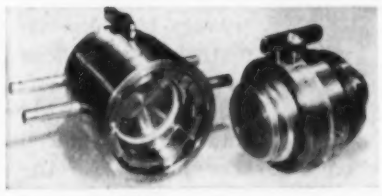
ROLL TYPE MARKING DEVICE
imprints 3/16 x 8-in. legend



Bars, tubes, rods and sheets of metal, plastic, glass, wood, rubber and composition can be marked with any desired information using high-speed manual Rolamarker 601. Device imprints 3/16 x 8-in. legend in repeated pattern over length of material. Twin-roll inking system re-inks type around diewheel after each impression. Rubber type is held securely by means of grooved base. Marker is supplied with type and various colored inks. Made by **Adolph Gottscho, Inc.,** 6C Terminal Rd., Hillside 5, N. J.

For more details circle NED-5272 on enclosed inquiry slip

NO-LOSS COUPLING
disconnects without liquid loss



Two self-closing valves, one in either half, fit flush with the ends of this coupling to prevent loss of a single drop when it is disconnected. Made for handling of dangerous and corrosive liquids, coupling is designed so that it cannot be disconnected until both shutoff valves are turned. It is made of stainless steel in sizes to fit ¾ and 1¼-in. pipe. Temperatures from —65 to 400° F can be withstood. Made by **E. B. Wiggins Oil Tool Co.,** Dept. NED, 3424 E. Olympic Blvd., Los Angeles 23, Calif.

For more details circle NED-5273 on enclosed inquiry slip

simple adjustment!
special adjusting disc available

AN **AGASTAT** TIME DELAY RELAY for every requirement

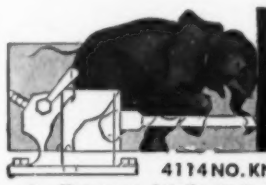
A'G'A DIVISION OF ELASTIC STOP NUT CORPORATION OF AMERICA
1027 NEWARK AVE., ELIZABETH 3 NEW JERSEY

For more details circle NED-5274 on enclosed inquiry slip

Air Operated
ROTARY WORK FEEDER

Deftly holds and delivers small parts to drill, tap, swage, stake, etc. Stations accurate to .002". Guaranteed against over-travel or "skipping". Indexes as slow or fast as you like, up to 10,000 per hour. Compact and sturdy, easy to tool and hook up.

Standard dial plate 10"; available in 12". For a new job, simply tool up a new dial. Readily combines with "MEAD-MATIC" Timer, Air Hammer, Air Press, Drill presses, etc.—to make almost completely automatic machine—operator merely loads. Write for full details.



MEAD SPECIALTIES COMPANY
4114 NO. KNOX AVE., DEPT. NA-62, CHICAGO 41, ILL.

For more details circle NED-5275 on enclosed inquiry slip

helpful HYDRAULIC PRESS catalog

Keep it in your machine tool file. Hannifin Standardized Hydraulic Presses Catalog contains complete descriptions and specifications on Hannifin Forcing Presses, Straightening Presses, Column-Type Presses. Hannifin Corporation, 1127 S. Kilbourn Ave., Chicago 24, Ill.

do ALL you CAN do . . . with

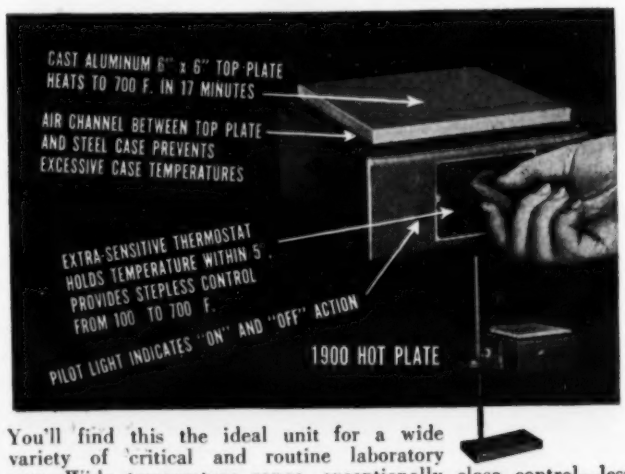
HANNIFIN

Air Cylinders • Hydraulic Cylinders • Hydraulic Presses
Pneumatic Presses • Hydraulic Riveters • Air Control Valves

For more details circle NED-5276 on enclosed inquiry slip

VERSATILE, HANDY HOT PLATE

for both exacting requirements and general heating in Laboratories and Plants



You'll find this the ideal unit for a wide variety of critical and routine laboratory uses. Wide temperature range, exceptionally close control—less than 5° F variation. Completely variable control over full temperature range. Compact, convenient — plugs into 110 V., 50/60 Cy. Only $19.75. Write for literature and nearest dealer's name.

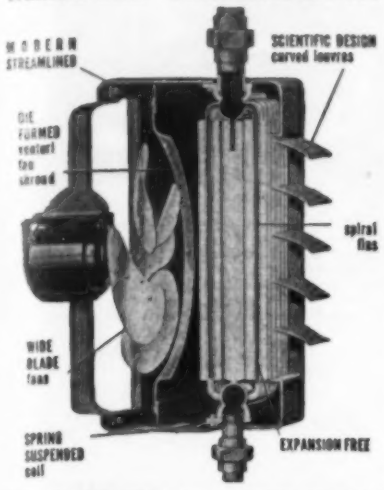
TEMCO HOT PLATES & FURNACES

THERMO ELECTRIC MFG. CO., 484 HUFF ST., DUBUQUE, IOWA

For more details circle NED-5277 on enclosed inquiry slip

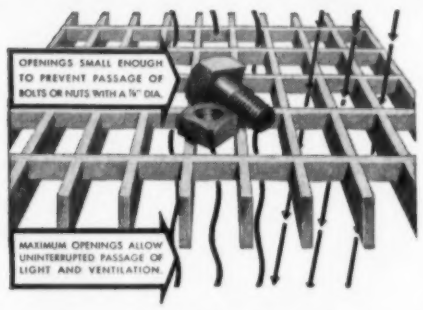
UNIT HEATER . . sets new standard of quietness and heating efficiency

McCord Unit Heaters are a time proven product embodying design based on years of experience in the heat transfer field. These units are not only rugged in design and guaranteed for use on #150 p.s.i. steam pressure but are made attractive in appearance. Two outstanding features appeal to maintenance engineers—we use standard motors with standard bases which quickly permits the use of replacement motors should a motor fail in service—the heating element is made of individual spiral fin tubes which are free to expand independently without putting a strain on the brazed joints. The entire heating unit is spring suspended and floats free in the casing, eliminating rigid connections. Improved type fan blades deliver large volumes of air with minimum air noise and vibration which makes these units suitable for office and store use. A complete line of vertical projection type unit heaters and blast coils are also available. Catalog on request or write for folder. "Instructions for Maintenance of Unit Heaters." **McCord Corporation,** Detroit, Mich. *Advt.*



▲ For more details circle **NED-5278** on enclosed inquiry slip ▲

TRI-LOK RECTANGULAR OPEN STEEL FLOORING



Tri-Lok strength is obtained by truss action through twisted cross-bar, curved in opposite directions at each bearing-bar. Standard openings in Tri-Lok Rectangular Steel Flooring are 1" x 3⅞"—other sizes can be supplied as required.

Diagonal, or Super-Safety U-type Flooring, and stair treads of all types, are available. Bulletin NE 1140 describes the construction features of Tri-Lok Open Steel Flooring.

The Tri-Lok Company is also equipped to furnish *riveted* and Tri-Forged *welded* open steel flooring. Tri-Lok grating can be furnished in a variety of metals, including aluminum alloy, stainless steel, etc.

DRAVO CORPORATION
National Distributor for the Tri-Lok Company
Dravo Building, Pittsburgh 22, Pennsylvania
Sales Representatives in Principal Cities

▲ For more details circle **NED-5279** on enclosed inquiry slip ▲

BOOTS and DIAPHRAGMS

Acushnet precision molded boots and bellows of special rubber stocks provide sustained flexibility at extremely high or low temperatures, with high resistance to various fluids and gases. DIAPHRAGMS of all sizes accurately produced, with or without fabric insert, exact to specifications. All products are made to order, and not stocked.

Acushnet
PROCESS COMPANY
NEW BEDFORD, MASS., U. S. A.

Address all Correspondence to 760 Belleville Ave., New Bedford, Mass.

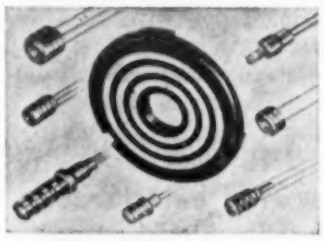
▲ For more details circle **NED-5280** on enclosed inquiry slip ▲

DUST COLLECTOR serves remotely located equipment

Grinders, polishers, sanders, buffers and other remotely located dust sources are served efficiently by this model 520 self-contained Dustkop dust collector. It develops 525 cfm at static suction of 2-in. water lift. Features include self-clearing paddle wheel fan driven by 1/3-hp 110, 220 or 440-v motor; built-in cyclone separator and renewable spun glass fiber filter. Hand shaker permits periodic shake-down to extend filter life. Unit will collect dust, dirt, lint, abrasives, chips and shavings. Made by **Aget-Detroit Co.,** 201 Main St., Ann Arbor, Mich.

▲ For more details circle **NED-5281** on enclosed inquiry slip ▲

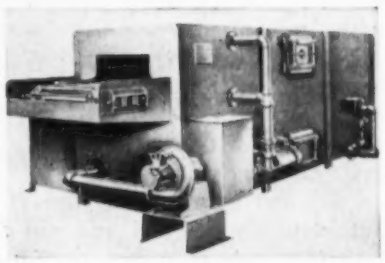
SLIP RINGS & COMMUTATORS made to user's specifications



Dimensional precision, accurate concentricity and high dielectric qualities are features of molded or fabricated types of slip rings and commutators. Electroplated types have extreme accuracy and can be used on instruments such as synchros. Produced by Electro Tec process, these units are available in miniature and subminiature sizes with diameters as small as 0.035-in. Made by **Instrument Corp. of America,** Blacksburg 2, Va.

▲ For more details circle **NED-5282** on enclosed inquiry slip ▲

FOUNDRY FLASK WASHER washing solution is filtered



Sand is quickly and completely removed from foundry flasks with this A-F washing machine which utilizes the Super-Spray cleaning system. Flasks pass along on bar type conveyor through consecutive high-pressure, fan-shaped curtains of cleaning solution from above, below and both sides. Solution, in recirculating through machine, flows very slowly through Slo-Flo tank so that sand settles out of solution before it reaches screen tank which filters out foreign particles that might clog spray nozzles. Made by **Alvey-Ferguson Co.,** Washing Machines Div., Dept. NE, 75 Disney St., Cincinnati 9, O.

▲ For more details circle **NED-5283** on enclosed inquiry slip ▲

MANY INDUSTRIAL ROLL PROBLEMS are solved by using

SHAF-TITE* ROLLS

Minimum sizes 3" diameter and 3' face length

Patented constructions provide strongest possible shaft setting. Take your choice of many different types and materials—wood, rubber, iron, brass, stainless steel, etc. Whatever your roll problem, put it up to

RODNEY HUNT

Send For Catalog Today!
Industrial Roll Division
RODNEY HUNT MACHINE CO.
743 Main Street, Orange
Massachusetts, U.S.A.

* Reg. U. S. Pat. Off.

▲ For more details circle **NED-5284** on enclosed inquiry slip ▲

White... Moisture-Resistant!

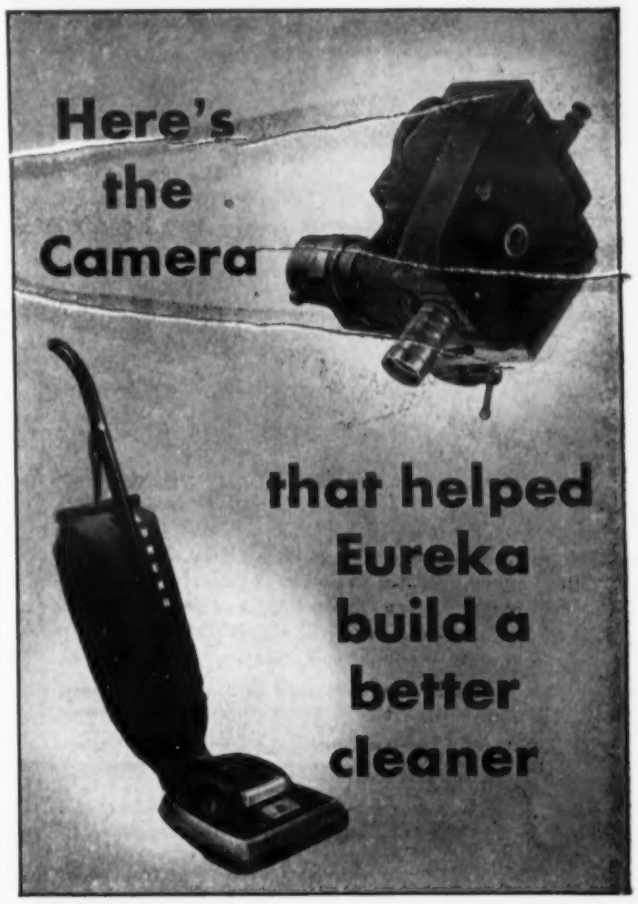
This new, white Bruning pencil tracing cloth lets you draw better and faster than ever before, gives you an improved drawing surface with unsurpassed *permanent* translucency for top-notch reproductions.

Here are the six reasons Brutex does a better job: 1. The super-velvet matte surface is exactly *right* for pencils of even the harder grades. 2. Translucency is clear and uniform. 3. Repeated erasures do not affect the surface. 4. It's moisture-resistant. 5. Brutex won't discolor or become brittle. 6. All qualities are *permanent!*

Get free booklet from CHARLES BRUNING CO., INC., Department C62 Teterboro, N. J.

BRUNING
Everything for the Engineer and Draftsman

▲ For more details circle **NED-5285** on enclosed inquiry slip ▲



Eureka Williams Corporation engineers had a tough design problem: the elimination of excessive wear on a vacuum cleaner drive belt turning a brush roll at 3500 rpm.

Instead of costly and time-consuming "cut-and-try" experimentation, they slowed the motion over 200 times with the Kodak High Speed Camera. When the 16mm film was projected at normal speed, the answer was readily apparent—a belt material of different characteristics. In addition, the pictures showed how a change in brush design would greatly increase sweeping efficiency.

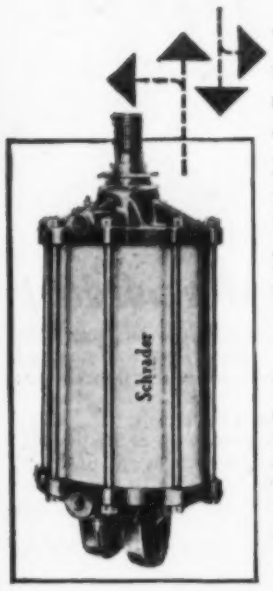
Here is but one example of how the Kodak High Speed Camera, taking up to 3200 pictures a second, solved a difficult design problem. The booklet, "Magnifying Time," will show how high speed photography can help solve your problems of design, production, and product performance. For your copy, write to Eastman Kodak Company, Industrial Photographic Division, Rochester 4, N. Y.

the Kodak HIGH SPEED Camera

Kodak

▲ For more details circle **NED-5286** on enclosed inquiry slip ▲

Let Schrader Air Cylinders shoulder your work load



There are hundreds of places in your plant where you can speed up production and reduce fatigue. Look around—you can undoubtedly find many places where manual lifting, lowering, pushing or pulling is slowing up production. That's where you need Schrader Air Cylinders.

Available for pushing, pulling, lowering or lifting—with or without cushion—Schrader Air Cylinders and Operating Valves are made in sizes and mountings to meet your needs. Write for the Schrader catalog, which gives a full description.

A. SCHRADER'S SON

Division of Scovill Manufacturing Company, Incorporated

459 Vanderbilt Ave., Dept. E-43, Brooklyn 17, N. Y.

For more details circle **NED-5287** on enclosed inquiry slip

HEAVY-DUTY Foot Switch

Available with or without pedal guard, in several types

STREAMLINED to match modern machine styling • Heavy cast case, gasketed for oil-tight applications • Compact design—hugs floor—won't tip • Wide pedal, operable from three directions but protected against accidental contact or falling objects • Adjustable stroke. Short motion and slight angle eliminate ankle fatigue • Self-contained contact mechanisms easily wired or replaced • Snap action contacts, rated 600 volts pilot duty, A.C. or D.C.

Write for Bulletin 9002 AW. Square D Company, 4041 North Richards Street, Milwaukee 12, Wisconsin.

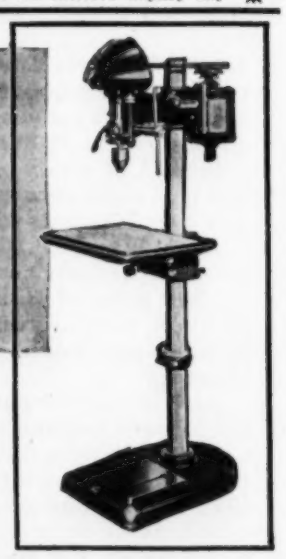
Ask Your Electrical Distributor for Square D Products

SQUARE D COMPANY

For more details circle **NED-5288** on enclosed inquiry slip

This DELTA 14-inch Drill Press

IS SCORES OF MAINTENANCE TOOLS IN ONE



Here's a machine that pays for itself very quickly by doing a wide variety of woodworking operations, in addition to drilling. You can do sanding, routing, shaping, mortising, tapping and many others. Ideal for metalworking, too—capacity is ⅜" in steel, ½" in cast iron.

With the exclusive Delta interchangeable spindle, the cutting tool can be changed in seconds.

The Delta 14" drill press is easily portable—bring the tool to the job or the job to the tool.

Send for the Delta AB-51 Catalog with full specifications covering all Delta drill presses.

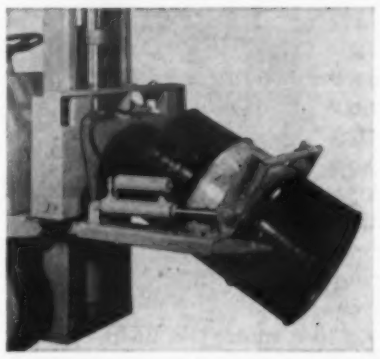
There's a Delta Power Tool for Your Job-Wood or Metal Working

53 MACHINES — 246 MODELS — MORE THAN 1300 ACCESSORIES

DELTA MILWAUKEE — **DELTA POWER TOOL DIVISION**
Rockwell MANUFACTURING COMPANY
626F N. LEXINGTON AVENUE, PITTSBURGH 8, PA.

For more details circle **NED-5289** on enclosed inquiry slip

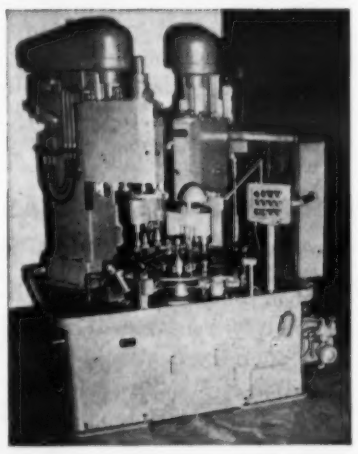
DRUM UP-ENDER ATTACHMENT
rotates to stack, tilts to empty



Heavy drums can be picked up, transported, stacked and emptied by this hydraulic drum up-ender attachment for Baker fork trucks. Drums are rotated 90 degrees for vertical or horizontal stacking, or tilted 45 degrees below horizontal for emptying at any height within truck's lift range. Removal is by taking out two lock pins, unsnapping one quick-demountable hose coupling and sliding unit off the forks. Shoes have rubber-faced grab plates. Unit adds a fifth purpose to company's four-purpose carriage which provides standard forks, fork spacer, automatic adjusting clamp and side-shifter in one unit. Both carriage and up-ender can be mounted on 2000, 3000 and 4000-lb Baker fork trucks. Made by **Baker-Raulang Co.**, Baker Industrial Truck Div., 1245 W. 80th St., Cleveland 2, O.

For more details circle **NED-5290** on enclosed inquiry slip

MULTISPINDLE MACHINE
hydraulically operated unit threads, reams, taps and drills automatically



Production rates in excess of 2700 pieces per hour are possible with No. 75 Hydraulic drilling, reaming, tapping and threading machine. This electrically controlled machine has fast index which can be furnished with any number of divisions. It can be equipped with self-centering three-jaw chucks or with two-jaw chucks mounted on top and hydraulically operated to close and open automatically at start and end of cycle.

Drilling side is driven by 5-hp motor and tapping side by 3-hp motor through three-step V-belt cone pulley and pickoff gears which give 12 speed steps from 240 to 1328 rpm. Multiple heads have individual spindles with ½-in. vertical adjustment so that all tools are at same height, even after grinding. JIC wiring is standard, and built-in safety device protects operator and machine. Integral coolant system is employed. Made by **Kaufman Mfg. Co.**, 543 S. 29th St., Manitowoc, Wis.

For more details circle **NED-5291** on enclosed inquiry slip

More Production for Your Glove Dollars

R-15 Extra Duty, red neoprene coated fabric, curved fingers, non-slip grip, preflex palm and inserted thumb design. Knit wrist.

PIONEER **Stanzoils**®

It pays you to buy gloves that permit fast and easy work, with protection. No one or two gloves fit all jobs. There's more production in the right glove for each job. PIONEER's new Stanzoil catalog shows you how to buy. *Unbiased advice—Stanzoils include all kinds of liquidtight gloves:* all-neoprene, neoprene and vinyl-coated. 32 styles, weights, sizes, colors. Get dexterity plus utmost protection. Increase production, avoid work stoppage, satisfy workers—write for your Stanzoil catalog today!

Industrial Products Division

The PIONEER Rubber Company
634 Tiffin Road • Willard, Ohio

STANZOIL PIONEER

OVER 30 Years OF QUALITY GLOVE MAKING

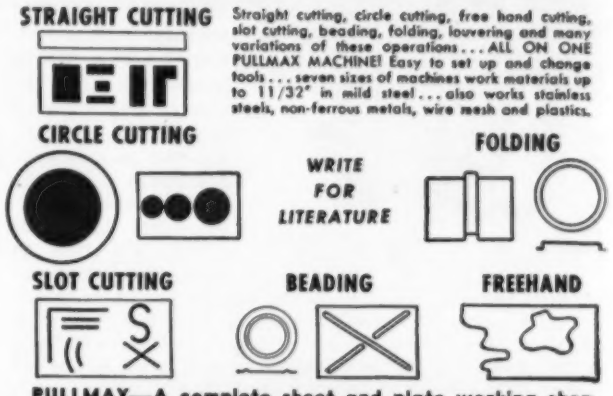
For more details circle **NED-5292** on enclosed inquiry slip

WORKING SHEET OR PLATE STEEL?

LOOK at what PULLMAX CAN DO

STRAIGHT CUTTING

Straight cutting, circle cutting, free hand cutting, slot cutting, beading, folding, louvering and many variations of these operations... ALL ON ONE PULLMAX MACHINE! Easy to set up and change tools... seven sizes of machines work materials up to 11/32" in mild steel... also works stainless steels, non-ferrous metals, wire mesh and plastics.



PULLMAX—A complete sheet and plate working shop in one machine.

AMERICAN PULLMAX CO., INC.

2457 N. SHEFFIELD AVENUE, CHICAGO 14, ILLINOIS

For more details circle **NED-5293** on enclosed inquiry slip

THERE'S NOTHING LIKE A

Clarke

You name the problem... Clarke has the answer. For every phase of floor maintenance there's a Clarke machine to deliver year after year of rugged, dependable service. For well-kept floors at lower cost there's nothing like a Clarke!

Write for Full Information

CLARKE SANDING MACHINE COMPANY
226 Clay Street Muskegon, Michigan

Sales Representatives and Service Branches in Principal Cities

Porter-Cable floor sanders and edgers are now manufactured and distributed by Clarke Sanding Machine Company. Sales and service of these machines is available through Clarke authorized sales representatives and service branches.

For more details circle **NED-5294** on enclosed inquiry slip

Collapsible pallet-box plus Gerrard Steel Strapping helps cut shipping costs!

Photo courtesy of International Harvester Company, Industrial Power Division

• The collapsible pallet-box shown here carries 3450 lbs. of front axles. Gerrard Round Steel Strapping reinforces all six sides of the container, keeping the box rigid and the contents safe until they reach their destination. When the box is unloaded and all straps removed, the box may be quickly collapsed and its members strapped together for return shipment. Costly shipping space is thereby conserved.

Call a Gerrard engineer for detailed information about how the Gerrard Method of Strapping can help you cut shipping costs, speed up production line tying, eliminate unnecessary containers or give stronger reinforcement to cartons, boxes, crates and pallets. Write for a free copy of the *Blue Book of Packaging*.

GERRARD STEEL STRAPPING DIVISION
UNITED STATES STEEL COMPANY
4717 S. Richmond St., Chicago 32, Ill.

U·S·S GERRARD ROUND STEEL STRAPPING

UNITED STATES STEEL

▲ For more details circle **NED-5295** on enclosed inquiry slip ▲

PRE-ENGINEERED
PRE-LUBRICATED

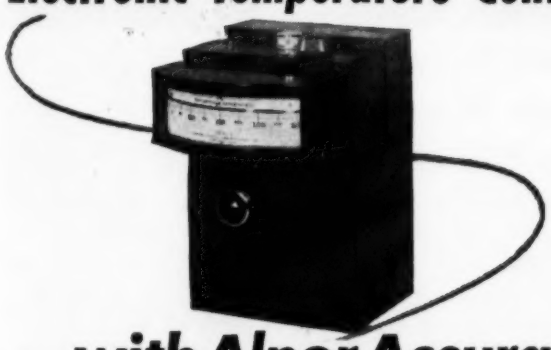
PRE-FABRICATED

TRANSALL permits easy and quick assembly of your belt conveyor system to fit your needs. Simply use *pre-fabricated* head and tail sections and variable number of standard size Intermediate sections. TRANSALL conveyors are easy to lengthen, shorten, or move by quick dis-assembly. Life-time factory-sealed *pre-lubricated* idlers lower operating and maintenance cost. Write for free illustrated folder. Address TRANSALL, INC., 120 N. 11th Street, Birmingham, Alabama.

TRANSALL SECTIONAL BELT CONVEYOR SYSTEMS

▲ For more details circle **NED-5296** on enclosed inquiry slip ▲

Electronic Temperature Control



...with Alnor Accuracy

Alnor, pioneer in the field of electronic temperature instruments, brings you automatic, precise temperature control for heat-treating furnaces, bake ovens—in fact, for any heating device whether electrically heated or fuel fired. It's the Alnor Temperature Controller—simple in design and operation, its accuracy proved on thousands of installations in many industries.

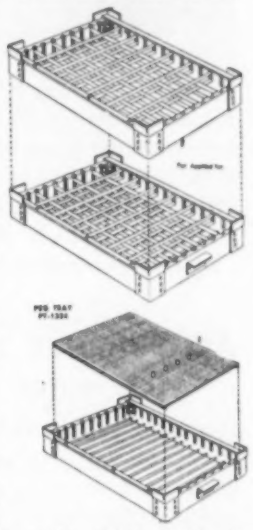
Easily and quickly installed, this instrument is ready to give you accurate controller service on new or existing heating equipment temperature—you merely set the pointer at the desired temperature and forget your indicating and controlling problems. But find out for yourself how Alnor accuracy and dependability can serve you in controller service; write today for complete details on the Alnor Temperature Controller . . . Alnor accuracy at a price you can afford. Illinois Testing Laboratories, Inc., Rm. 529, 420 N. La Salle Street, Chicago 10, Illinois.

Alnor **PRECISION INSTRUMENTS FOR EVERY INDUSTRY**

▲ For more details circle **NED-5297** on enclosed inquiry slip ▲

MATERIALS HANDLING TRAY
varied space combinations afforded by changeable wood dowel dividers

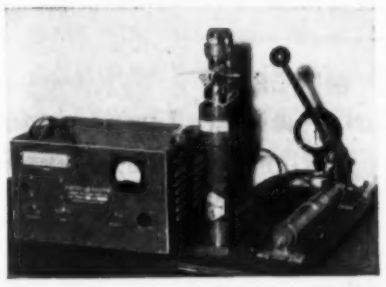
Hardwood materials handling tray which has inside dimensions of 24 x 13½ x 2⅜ in. employs hardwood dowel dividers for many space combinations to accommodate various size and shape parts. Bottom of tray consists of ½-in. dowels running widthwise on 1½-in. centers to afford sufficient support for metal parts plus opening for free drainage of liquids. Dowels can be set in end and side slots to run crosswise and lengthwise in any desired arrangement to hold and protect parts being handled. Build-up section can be added to master unit for tall parts.



Steel corners which extend above top edge add rigidity to unit and serve as guide to stacking. A peg tray made of 3/16-in. holes tempered board with 880 3/16 in. holes on 9/16-in. centers and which lies on dowelled bottom is available for small parts such as bushings or gears. Hardwood pegs project 1 in. above tray base. Made by **Albert Wesling & Sons, Inc.,** Dept. AB, 2912 W. Lake St., Chicago 12, Ill.

▲ For more details circle **NED-5298** on enclosed inquiry slip ▲

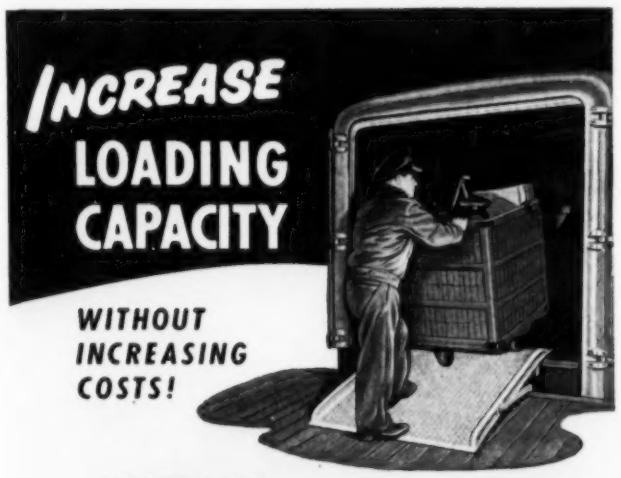
SURFACE-RESISTANCE INDICATOR
measures resistance between metal pieces to be welded



A simple check on prewelding cleaning processes upon which surface resistance of metal depends is provided by portable surface-resistance indicator designed to measure accurately resistance between metal pieces to be welded. Equipment is comprised of microhmmeter and sample holder, the latter of which consists of hydraulic ram with pair of current electrodes, electromotive force electrodes and pressure gage. The emf electrodes are spaced to make measurement independent of sample size.

Unit has 0-200 and 0-2000 microhms ranges, and resistance is indicated directly in microhms on linear 100 division scale. Microhmmeter measures 9½ x 15 x 11 in. and weighs 23 lb, while holder weighs 30 lb, has clamp throat depth of 3 in., electrode clearance of 2 in., 4-in. electrode surface radius and ⅝-in electrode diameter. Made by **General Electric Co.,** Special Products Div., Schenectady 5, N. Y.

▲ For more details circle **NED-5299** on enclosed inquiry slip ▲



Mag Liner
MAGNESIUM DOCK BOARDS

MAGNESIUM light! **MAGNESIUM** strong! MAGLINER Dock Boards provide strength-to-spare for the heaviest of loads and equipment, yet are easily handled by one man! Eliminate loading accidents . . . lifting injuries! Get the benefits of smoother, faster, more efficient loading. Before investing in any dock board, write for descriptive bulletin DB-203.
Standard and Custom-engineered Models

MAGLINE, INC. • P.O. BOX 396 • PINCONNING, MICHIGAN

▲ For more details circle **NED-5300** on enclosed inquiry slip ▲

Man alive! This Hydraulic Jack DOES EVERYTHING but walk and talk!

It's *no ordinary* hydraulic jack . . . this is a *"Porto-Power"!* Its compact, *remotely-controlled* ram is threaded for fast assembly with ingenious attachments . . . to push, pull, clamp, press, bend or spread . . . over any span, any angle!

Every maintenance crew needs this *Porto-Power* S31 KIT

Replace slow, dangerous, damaging maintenance methods! The 10-ton hydraulic unit and attachments save up to 9 man-hours moving a single machine. Pull pulleys; push out pins, bushings, bearings; bend rail; clamp—do "1001" other tough jobs!

Buy from leading supply houses. Write for "Porto-Power" catalog.

BLACKHAWK

BLACKHAWK MFG. CO., Dept. P1462, Milwaukee 1, Wis.

▲ For more details circle **NED-5301** on enclosed inquiry slip ▲

Write for our catalog of materials handling equipment

Well Stacked!

Palletized goods is well stacked when it's stacked on strong, flexible space conserving E.M.I. prefabricated pallet racks. They save handling time by permitting removal of low level material without disturbing that above.

EQUIPMENT MFG. INC.
21566 Hoover Road
Detroit 5, Michigan

▲ For more details circle **NED-5302** on enclosed inquiry slip ▲

It's NEW!

It's FAST!

TOLEDO® SPEEDWEIGH OVER-UNDER SCALES

Here's *new speed with accuracy* for you in check weighing, packaging, many other operations today . . . 3 sizes—to 5 lb., to 20 lb., to 50 lb.! Shadowfree wide-angle reading . . . accurate to 1/64 of an ounce . . . new improved knife-edge check link system . . . *exclusive* "coined" bearings for greater accuracy, longer life . . . stainless steel beam . . . enclosed levers in one-piece housing . . . choice of platters and scoops . . . many more *plus* features! Write for bulletin 1416. Toledo Scale Company, Toledo 1, Ohio.

TOLEDO® Headquarters for SCALES

▲ For more details circle NED-5305 on enclosed inquiry slip ▲

FIRST CHOICE

Versatile . . . highly accurate . . . easy to operate, this quality-built toolroom lathe is first choice among toolmakers because it makes their most difficult, close-tolerance jobs easier. Designed for hard industrial use, it will continue to turn out, year after year, the kind of precision work modern machining practice calls for. Write for catalog on the 16" Toolroom Lathe today.

SOUTH BEND LATHE

SOUTH BEND 22, IND. • *Building Better Tools Since 1906*

▲ For more details circle NED-5306 on enclosed inquiry slip ▲

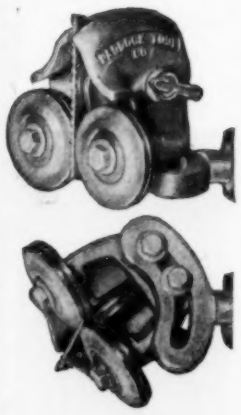
MORE SPEED MORE SUPPORT

BAND-SAWS

NEED "PADDOCK GUIDES" for Faster, Better Production!

Installed on either new or old band-saws, PADDOCK BALL-BEARING GUIDES improve operation in many ways! More materials can be cut—blade-breakage is reduced—workmen are better protected—faster output results!

When a 36" machine is equipped with Model 20 guides and the guides are adjusted to hold the blade at a 45° angle (see angular adjustment at right, lower picture) material 22" wide can be cut to any length. Inter-changeable ball-bearing wheels, running with saw blade, give friction free support! Thousands are in use in every type of Industry!



Write for prices and complete information. Give size of machine and material being cut.

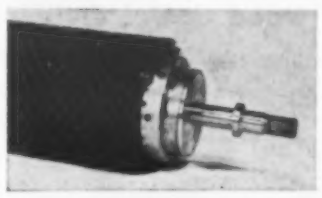
PADDOCK TOOL CO.

Guide Makers Since 1920

1418 Walnut St. Kansas City 6, Mo.

Paddock BALL-BEARING BAND SAW GUIDES

TUFTED METAL CORE BRUSH
bristle is renewable when worn

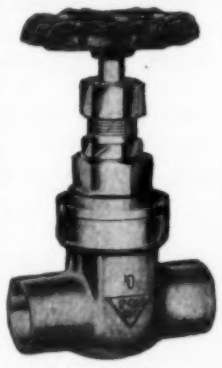


Tufts of bristle on this sagless aluminum or steel core brush are arranged in slotted bands of stainless steel or copper. This construction imparts stiffness to the brush. The closely wound metal bands and solvent resisting cement in which the tufts are set make the brush impervious to moisture, yet allow water to flow freely between the tufts. Bristle is renewable when worn. Made by **Industrial Brush Co.**, 7 Bridge St., Riegelsville, N. J.

▲ For more details circle NED-5307 on enclosed inquiry slip ▲

ALL-PURPOSE GATE VALVE
for water lines or steam systems

Providing full unobstructed flow, No. 90 bronze solder-end gate valve is practical for hot and cold water lines or low pressure steam in plumbing, heating and air conditioning systems used in industrial plants, hospitals or offices. This valve has amply sectioned body that will not distort and seat that will not warp under soldering temperatures. It is used with K, L and M copper tubing and has working pressure of 125 psi for steam and 200 psi (nonshocking) for cold water, oil or gas. Made by **American Chain & Cable Co.**, Reading-Pratt & Cady Div., Reading, Pa.



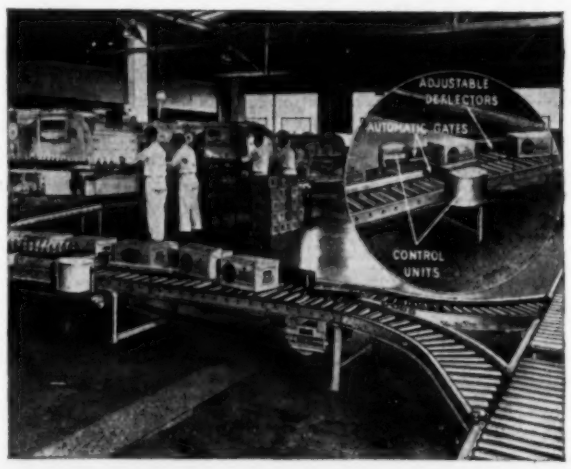
▲ For more details circle NED-5308 on enclosed inquiry slip ▲

RUNNING TIME METER
is hermetically sealed, tamperproof

Operating time of machine tools, electronic, electric or general industrial equipment can be registered by this hermetically sealed running time meter. It is tamperproof, being sealed in a drawn steel case. Meter will perform in wide range of temperatures and in hazardous atmospheres. Dial is viewed through a tempered glass crystal which is fused to the case. Power is furnished by a self-starting synchronous motor available for 110-125, 220-250 v, 50 or 60 cycles ac. It registers in 1/10-hour steps to 9999.9 or hour steps to 99999. Magnetic shielding is provided by drawn steel case. Made by **Marion Electrical Instrument Co.**, 414 Canal St., Manchester, N. H.

▲ For more details circle NED-5309 on enclosed inquiry slip ▲

ALVEY-FERGUSON MergA-Flow
Automatically merges 2 conveyor lines into 1



The flow of cartons, cases and packages on two conveyor lines can now be automatically merged into a *single* line and directed optionally to either right or left by means of an electrically interlocked dual-gate system developed by Alvey-Ferguson and appropriately named MergA-Flow.

The A-F MergA-Flow eliminates traffic jams, maintains even flow, may be added to present belt or roller conveyor systems. For information on this and other modern handling methods write **The Alvey-Ferguson Co.**, 32 Disney Street, Cincinnati 9, Ohio. (*Advt.*)

▲ For more details circle NED-5310 on enclosed inquiry slip ▲

NEW EC&M *Thermal-Magnetic* OVERLOAD RELAYS COMPLETELY PROTECT A-C MOTORS UNDER *all* CONDITIONS

¼ rear view shows independent thermal and magnetic trip-elements—both are adjustable. Relay is front-connected, removable as a unit from its mounting-base.

DIRECT-ACTING-NO DASHPOTS

Instantaneous Trip (magnetically)
Timed Responsive Trip (thermally)
on Single Phase, Failure to Start, during Running, etc.
—all in this one relay.

ADVANTAGES

1. Inverse time-delay operation on overloads.
2. Instantaneous operation on short circuits.
3. Short thermal reset time.
4. Saturable core aids thermal inverse time element operating characteristics.
5. Transformer couples motor current to thermal action, resulting in accurate transmission of motor operating current for quick, positive response.
6. V-split laminated core, mechanically and magnetically locked, permits changing primary coils easily.
7. Primary coils have wider current ranges than comparable heater-type relays, resulting in fewer coils for wide range of motor sizes.

Write for new Bulletin 1180-36 describing these new relays.

THE ELECTRIC CONTROLLER & MFG. CO.

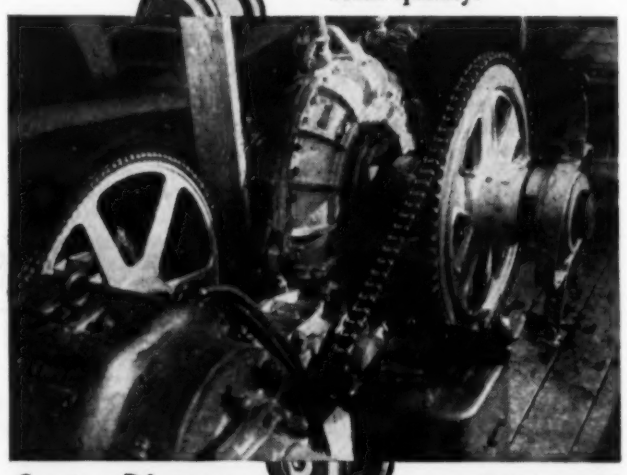
2698 EAST 79TH STREET • CLEVELAND 4, OHIO

▲ For more details circle NED-5311 on enclosed inquiry slip ▲

NO WASTED POWER WITH

DIAMOND ROLLER CHAINS

- No slip—machinery operates at maximum output rate continuously.
- 98-99% efficiency at point of use.
- Long life performance reduces down time, maintenance and replacement expense.
- Exclusive Diamond uniform quality.



Center Distances Can Be Long Or Very Short

Shaft to shaft operation can be accomplished without slip regardless of center distances. The wide range of types and sizes of Stock Sprockets meet most all Roller Chain Drive requirements.

A copy of Catalog 709 is yours for the asking.

DIAMOND CHAIN CO., Inc.

Dept. 457, 402 Kentucky Avenue., Indianapolis 7, Indiana

Offices and Distributors in All Principal Cities

Refer to the classified section of your local telephone directory under the heading CHAINS or CHAINS-ROLLER

DIAMOND ROLLER CHAINS

▲ For more details circle NED-5312 on enclosed inquiry slip ▲

WIDE SHEETS EASILY SLIT

Throat depths of 18, 24 and 36 inches make it easy to slit wide sheets on Steelweld Pivoted-Blade Shears. 24 inches is standard for all but the smallest machines. 36 inch throats can be provided for many of the larger machines.

This permits the slitting of plates of 36" to 72" wide down the middle for any length.

Steelweld Shears are loaded with exclusive features that speed production and cut costs.

There are no other shears like them.

CUTS METAL 1/8" TO 1 1/2"

Complete line machines available for shearing steel 6'-0" to 18'-0".

STEELWELD Pivoted-Blade SHEARS CATALOG No. 2011

Send for free copy of catalog No. 2011.

THE CLEVELAND CRANE & ENGINEERING CO.
6621 East 282nd St., Wickliffe, O.

STEELWELD SHEARS

For more details circle **NED-5313** on enclosed inquiry slip

Complete Line of HEAD BLOCKS WINCHES COUNTERWEIGHT SYSTEMS

Loads ranging from a few pounds to 40 tons and more must be hoisted and moved quickly and safely on the theatre stage. The complete line of head blocks, hand and motorized winches and counterweight systems — all standard catalog items — which J. R. Clancy, Inc. has supplied for the stage for 76 years is available to meet the many similar requirements of modern industry.

Send for Catalog

Theatrical Equipment Division

J. R. CLANCY INC.
1020 W. BELDEN AVE., SYRACUSE 4, N. Y.

For more details circle **NED-5314** on enclosed inquiry slip

Join plain-end pipe *permanently*. The quick, easy economical way is with a Dresser Style 38, using only a wrench. No exact pipe alignment necessary. Permanent, "flexible-tightness" prevents leaks from normalcontraction, expansion stresses.

Available for sizes 3/8" ID through 72" OD steel pipe and cast iron pipe.

DRESSER "FLEXIBLE-TIGHT" COUPLINGS

Dresser Manufacturing Division, 59 Fisher Ave., Bradford, Pa. (One of the Dresser Industries). Warehouses: 1121 Rothwell St., Houston, Texas; 101 S. Bayshore Highway, South San Francisco, California.

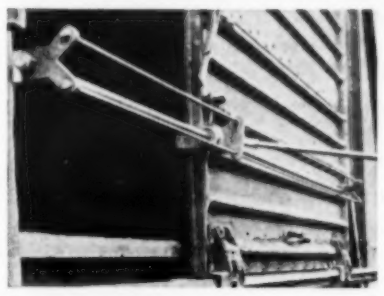
For more details circle **NED-5315** on enclosed inquiry slip

SMALL PARTS CABINET
drawer compartments are variable

Designed for use on benches, counters and shelves, small parts cabinets and cases have handle and label holder on front of each drawer. Slots on 1-in. centers in drawers permit quick rearrangement for accommodating various parts quantities. Finish is baked green enamel. Made by **Bay Metal Products,** 3009 N. Sixteenth St., Philadelphia 32, Pa.

For more details circle **NED-5316** on enclosed inquiry slip

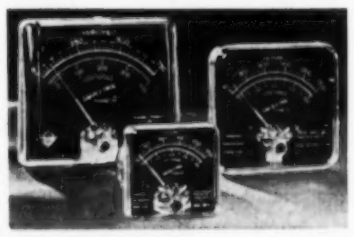
FREIGHT CAR DOOR OPENER
34-lb unit exerts 4000-lb pressure



Balky freight car doors can be quickly, easily and safely opened and closed by the E-Z Way car door opener that is made of high strength alloy steel with a built-in lift and holding cam. Device smoothly exerts a 4000-lb constant pressure in direct line with movement. The 34-lb unit meets safety appliance laws and ICC safety rules. Use can be at any height off the ground or off the dock. Two small chains support the opener, facilitating use for one man operation. Made by **Penco Engineering Co.,** Dept. TR, 25 California St., San Francisco 11, Calif.

For more details circle **NED-5317** on enclosed inquiry slip

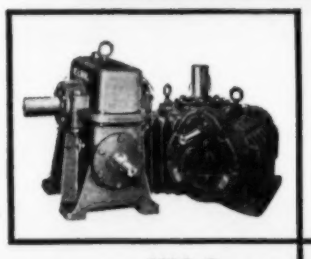
BLACK FACE PYROMETERS
three sizes measure −200 to 3000° F



Plastic case pyrometers with black dial faces are made in three sizes and nine temperature ranges for measuring from −200 to 3000° F. Models 451, 351 and 261, measuring 4½, 3¾ and 2½ in. square respectively, mount semi-flush in nonmagnetic panels, or in steel panels when specified. Millivoltmeter movements are medium high sensitivity at 4 ohms per millivolt, (222 ohms for 2500° F). They can be supplied with calibration for any standard thermocouple. Calibrating resistor adjusts meter to different lengths of thermocouple leads. Front cover snap-fits to case, is dustproof and weathertight, yet breathes with atmospheric pressure changes. Made by **Assembly Products, Inc.,** 1002 Bell St., Chagrin Falls 1, O.

For more details circle **NED-5318** on enclosed inquiry slip

See DE LAVAL for

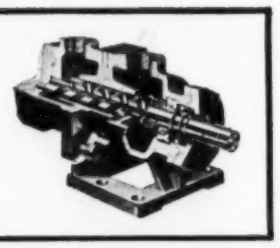


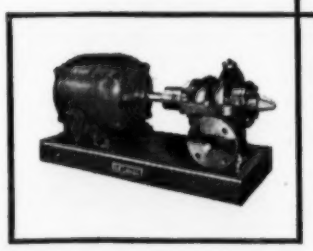
Worm Gear Speed Reducers

Made in horizontal and vertical, single and double reduction units for ratios to 8000:1 for transmitting up to 250 hp.

IMO Pumps

The A313A IMO—for general oil handling—capacities to 80 gpm—pressures to 150 psi. The A313B—for variety of oil handling services—capacities to 80 gpm—pressures to 275 psi (constant).





General Service Pump

In the GS pump, mechanical seals eliminate stuffing boxes—permanently lubricated ball bearings eliminate lubrication. Capacities to 400 gpm, heads to 230 feet.

DE LAVAL — DE LAVAL STEAM TURBINE CO. TRENTON 2, N. J.

DL 131

For more details circle **NED-5319** on enclosed inquiry slip

Generalift PALLET BOXES

1. CUT MATERIALS HANDLING COSTS
2. REDUCE STORAGE COSTS

SEND FOR FREE BOOKLET

General BOX COMPANY

GENERAL OFFICES: 1859 MINER STREET, DES PLAINES, ILL.

DISTRICT OFFICES AND PLANTS: Cincinnati, Denville, N. J., Detroit, East St. Louis, Kansas City, Louisville, General Box Company of Mississippi, Meridian, Miss., Milwaukee, Sheboygan, Winchendon. Continental Box Company, Inc.: Houston, Dallas.

For more details circle **NED-5320** on enclosed inquiry slip

HEADLINE NEWS

EXTRA... DETROIT POWER SCREWDRIVER ANNOUNCES

IMMEDIATE DELIVERY

No Waiting—Start Now to Benefit with These Outstanding ASSEMBLY AIDS

Various Models to Suit Your Requirements

ADD Phenomenal Speed and Efficiency

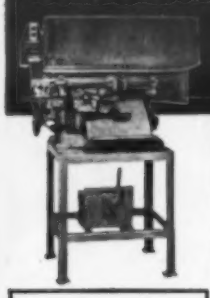
No need to continue slow, costly hand methods; use Detroit Power Screwdrivers and profit immeasurably by increased production and economy. Drive all types of screws with almost incredible speed, as fast as one to two seconds per screw. Detroit Power Screwdrivers play an important part in the present-day industrial capacity to produce rapidly . . . So, now that prompt deliveries are made possible, send sample assembly for production estimate at once and let our 26 years' experience as specialists in assembly problems serve your individual needs. Also receive our catalog describing in detail our complete line of POWER SCREWDRIVERS, HOPPER FEEDING UNITS, NUT DRIVERS and SPECIAL ASSEMBLING MACHINES.

DETROIT POWER SCREWDRIVER CO.

2819 W. FORT ST. DETROIT 16, MICHIGAN

For more details circle **NED-5321** on enclosed inquiry slip

How to CUT AND STRIP INSULATED WIRE... as fast as 3,000 lengths per hour!



ARTOS Automatic MACHINES REDUCE TIME AND COST

For quantity production of finished wire leads ... measured, cut to length, and stripped at one or both ends... investigate Artos Automatic Machines.

The Model CS-6 illustrated can complete up to 3,000 pieces per hour in 15-in. lengths, and other lengths in proportion. You save through combined operations... through quick, easy set-up... through unskilled help who can handle this machine. You obtain substantial time savings over the best manual or semi-automatic methods.

Highly accurate machine operation reduces work spoilage to an absolute minimum—errors due to the human element are eliminated. There is no cutting of strands or nicking of solid wire. Uniform lengths and uniform stripping are produced consistently.

MODEL CS-6E CAPACITY

FINISHED PIECES PER HOUR —15 in. lengths, 3000 per hour; 97 in. lengths, 500 per hour.
MAXIMUM STRIPPING LENGTH—1½ in. at each end.
MAXIMUM CUTTING LENGTH—97 in.
MINIMUM CUTTING LENGTH —2 in. (⅞ in. special).
WIRE HANDLED—Solid or stranded single conductor wires, parallel cord, heater cord, service cord, etc.
MAXIMUM WIRE SIZE—No. 10 stranded or No. 12 solid.

WRITE FOR BULLETIN

Get the complete story—write now for Bulletin 35-C on Artos Model CS-6 machines.

Automatic Wire Cutting and Stripping

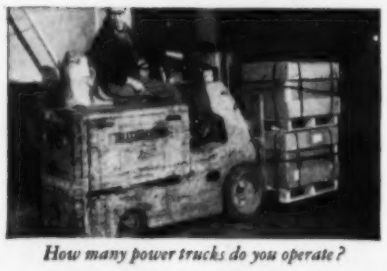
ARTOS ENGINEERING CO.

2751 S. 28th St. • Milwaukee 46, Wis.

For more details circle NED-5322 on enclosed inquiry slip

B.F.Goodrich

Extra-heavy loads to handle?



How many power trucks do you operate?

Use hand trucks in your plant?

TW ANALYSIS saves you up to 50%

YOU can cut tire and wheel costs up to 50% on any materials handling job by using the right type, size and tread compound and following our suggestions. Proper maintenance alone cuts costs 10% to 20%. Let a trained B. F. Goodrich Tire and Wheel Analysis man look over your operations. Without charge or obligation he'll make impartial recommendations—impartial because only B. F. Goodrich makes industrial tires to meet *every* requirement.

Use the coupon for complete information on this new Tire & Wheel Analysis Plan.

A similar plan is available for manufacturers of industrial hauling equipment.

The B. F. Goodrich Co.
Department TW-191
Akron, Ohio

Please give me additional information on your new Tire and Wheel Analysis plan.

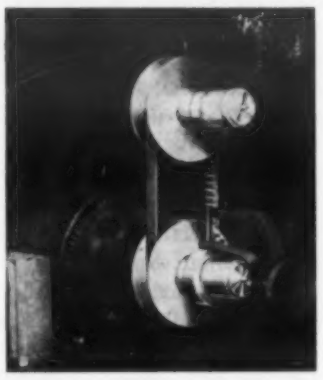
Name_____
Title_____
Company_____
City_____ State_____

RESEARCH KEEPS B.F.Goodrich FIRST IN RUBBER

BFG dealers sell and service a complete line of industrial tires.

For more details circle NED-5323 on enclosed inquiry slip

VARIABLE SPEED PULLEY has 9 to 1 range on fixed centers

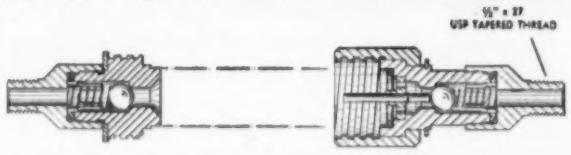


Roto-Cone manually operated variable pitch motor pulley, when used in combination with standard Roto-Cone variable pitch pulley and standard Varispeed belt, permits speed change ratio up to 9 to 1. Speed change is by axial adjustment of ball bearing - mounted retainer ring fixed on the pulley hub of the manual Roto-Cone. This causes the pulley to change pitch diameters. No adjustable motor base is needed with this drive. Models are available for fractional to 15-hp requirements. Made by **Gerbing Mfg. Corp.**, 11801 Milwaukee Ave., Northbrook, Ill.

For more details circle NED-5324 on enclosed inquiry slip

HIGH PRESSURE COUPLER is quick-disconnecting, self-sealing

Capable of withstanding a working pressure of 10,000 psi and tested at 20,000 psi, this high pressure quick-disconnect coupler is made of alloy steel and is self-



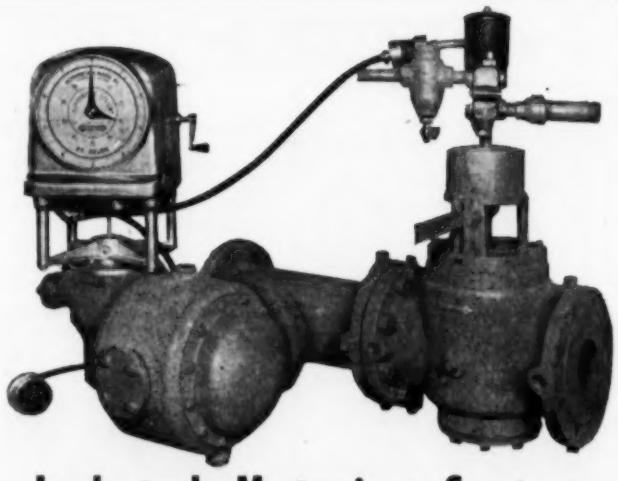
sealing when disconnected. Units have heavy aluminum protector caps and ¼-in. flow area. At 0.5-gallon per minute flow, pressure drop is 0.7-psi, while at 1, 2 and 4 gpm flows, pressure loss is 3, 11.2 and 40 psi. Coupler was designed by Glenn L. Martin Co. and is made and distributed by **Lewis Kirschman Co.**, 153 W. 23rd St., New York 11, N. Y.

For more details circle NED-5325 on enclosed inquiry slip

FOG SPRAY NOZZLE has three-foot applicator

Controlled spray pattern and volume are provided by HX5 fog spray nozzle which has 3-ft applicator positive shutoff and garden hose connection. Industrially, it is practical for cleaning, washing, applying chemicals and for fire fighting. Atomizing elements are series of interchangeable fan spray disks machined from stainless steel and are available for fan angles from 10 to 90 degrees with 1/10 to 8 gpm deliveries. Aluminum tube applicator is furnished straight or bent 30 degrees. Nozzle operates at 30 to 100 psi pressures. Made by **Bete Fog Nozzle Inc.**, 85 Pierce St., Greenfield, Mass.

For more details circle NED-5326 on enclosed inquiry slip



Jacketed Metering Systems

for automatic batching of viscous material

The Fluidometer System is available either jacketed or unjacketed. A jacketed Fluidometer System will handle heavy, hot, sticky materials as easily, as safely and as accurately as the unjacketed Fluidometer handles light, easy running liquids.

Fluidometer's accuracy and dependability have been proved in years of service under widely varying conditions. Anything that can be handled through a meter can be automatically batched by Fluidometer.

Write for Bulletin FL-49.

H&B ESTABLISHED 1883

HETHERINGTON & BERNER INC.

751 Kentucky Avenue Indianapolis 7, Indiana

For more details circle NED-5327 on enclosed inquiry slip

FREE!

New Guide to Military Packaging "Specs"

EASY TO READ EASY TO USE

The New MEHL Packaging Guide ... a condensed outline on "protective barrier" ... Moisture—Grease—Vapor-Proof Packaging ... simplifies military specifications.

Whether your requirements are large or small ... for domestic or export purposes ... MEHL packaging experts and resources are at your service.

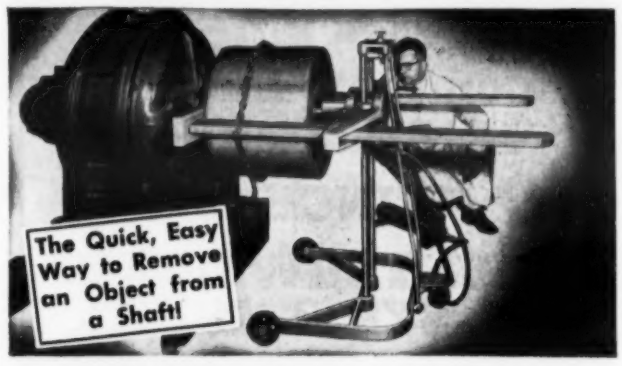
Send for your Free Guide or any service requirements.

MEHL MANUFACTURING CO.

2055 READING ROAD CINCINNATI 2, OHIO

A Division of Sydney-Thomas Corp.

For more details circle NED-5328 on enclosed inquiry slip



The Improved Hydraulic

PULLEY PULLER

For Removing Pulleys Wheels, Gears, Couplings Sheaves, etc.

ONE man can do it in minutes — even if objects are stuck fast. No crowbars, sledges or blowtorches. No damage to equipment. Puller is adjustable — easy to move — rugged. Hundreds being used in industry.

- 5-ton size on stand $62.50
- 5-ton size on wheels $92.50
- 20-ton size on wheels $290.00
- 50-ton size as shown $655.00

(F.O.B. Factory)

Write for complete information — Catalog E

INDUSTRIAL ENGINEERING EQUIPMENT CO.

122-124 E. 4th St. Davenport, Iowa

For more details circle NED-5329 on enclosed inquiry slip

Here's **TROUBLE-FREE FLOW CONTROL**

... for corrosive services

Hills-McCanna Valves are suitable for air, water, gases, volatile and viscous substances, semi-solids, etc. Hand-wheel or lever operated or choice of automatic or remote operators. Choice of 14 diaphragm materials; 49 body materials. Sizes ⅜" to 14". Write for catalog.

HILLS-McCANNA CO.

2455 W. Nelson Street • Chicago 18, Illinois

HILLS-McCANNA

saunders patent diaphragm valves

Also manufacturers of—Proportioning Pumps Force-Feed Lubricators • Magnesium Alloy Castings

For more details circle NED-5330 on enclosed inquiry slip

Only the New TYPE "R" MORRIS SLURRY PUMP *has these 4 features*

1. Gland is under suction pressure only. This feature practically eliminates packing troubles.
2. For dismantling, you need remove only four bolts. No internal studs or bolts . . . no troublesome fits or joints.
3. You can remove impeller and liner without disturbing piping.
4. Shell interchangeable for right or left-hand rotation. Suction and discharge nozzles can be rotated to positions in any of four quadrants.

The New Type "R" Morris Slurry Pump handles caustic or acid mixtures containing abrasives or solids; also ore concentrates, tailings, slag, residue from filters and classifiers.

Write for specifications and operation data on pumps best suited to your particular needs. No charge or obligation.

MORRIS MACHINE WORKS
Baldwinsville, N. Y.
Sales Offices in Principal Cities

MORRIS CENTRIFUGAL PUMPS

▲ For more details circle NED-5331 on enclosed inquiry slip ▲

LITTLE HUSTLER

CONVEYOR

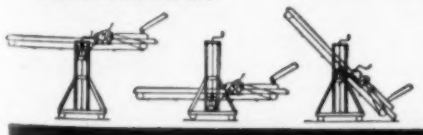
Portable, adjustable, versatile . . . LITTLE HUSTLER solves materials handling problems. It can be spotted instantly wherever needed and is particularly useful where working heights and layouts are subject to frequent change.

Usable either as an independent unit or as an auxiliary to permanent conveyor installations, LITTLE HUSTLER handles small and medium-size metal parts including cut-offs, blanks, formed stampings, etc.

This conveyor can be adjusted to any angle from horizontal to maximum of 45° by means of crank handle. Working height is regulated through 30-inch range by double-screw center lift.

LITTLE HUSTLER features all-steel welded construction, charging chute with positive trap, and two swivel and two stationary casters. Standard belting is neoprene-impregnated fabric. For applications involving excessive wear, MAY-FRAN hinged-steel belting can be supplied for greatly increased belt-life. Also available in the MAY-FRAN line of conveyors is the semi-stationary Model S LITTLE HUSTLER, which is specifically designed for applications in which complete portability and adjustability are not required.

Write today for 8-page illustrated catalog containing complete price and specification information.



449-MF

MAY-FRAN ENGINEERING, INC.
1711 Clarkstone Road • Cleveland 12, Ohio

▲ For more details circle NED-5332 on enclosed inquiry slip ▲

CABLE CUTTER does not distort cut ends

Heart-shaped jaw opening of No. 35 cable cutters is feature which results in clean cut through center of cable and leaves individual strands free from burrs. Cutter is adaptable to bare or insulated copper or aluminum cables up to 500,000 CM and accommodates outside insulation diameters up to 1½ in. It is suitable for preparing cable ends for insertion in precision fittings, because cut ends stay round. Stops on handle maintain minimum opening of 3-in. to prevent skinning knuckles. Made by **Thomas & Betts Co.**, 24 Butler St., Elizabeth 1, N. J.

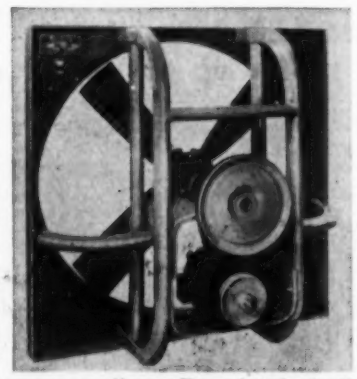
▲ For more details circle NED-5333 on enclosed inquiry slip ▲

REVERSIBLE WORK GLOVES have plastic protective coating

Reversible to fit either hand, these work gloves are reported to outlast four or more pairs of conventional work gloves. Long-wearing coating of Bakelite Vinylite resins will not crack, peel or scuff and resists moisture, oils, greases, acids and most chemicals. Free-swinging thumb permits glove to be worn on either hand, and their life can be extended by wearing them alternately on either hand. Nonslip finish assures strong grip. Made by **Washington Glove Corp.**, 104 N. Water St., Milwaukee 2, Wis.

▲ For more details circle NED-5334 on enclosed inquiry slip ▲

HEAVY DUTY INDUSTRIAL FAN is belt driven for quiet operation



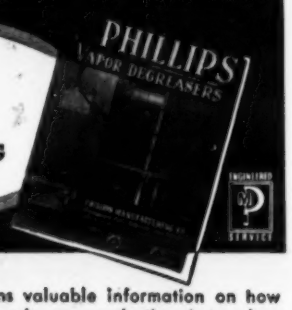
Industrial uses, duct work, mine exhaust systems and filtering units where large volume of air under static pressure is required are among applications of type PLBD heavy duty exhaust and pressure fan. Fan is belt driven for quiet operation and is equipped with nonoverloading cast aluminum airfoil type propellers. Completely ball bearing and with totally enclosed motors, units are available in 24 to 48-in. sizes with deliveries from 5,000 to 28,000 cfm. Made by **Chelsea Fan & Blower Co.**, Dept. NED, 639 South Ave., Plainfield, N. J.

▲ For more details circle NED-5335 on enclosed inquiry slip ▲

PHILLIPS

LEARN HOW VAPOR DEGREASING CAN CUT COSTS AND INCREASE YOUR PRODUCTION

SEND FOR YOUR FREE COPY OF PHILLIPS' NEW DEGREASING BULLETIN



HERE's a new bulletin that contains valuable information on how modern vapor degreasing speeds up production in modern factories by making metal cleaning operations faster and more economical. Listed below are some of the features of this new book:

WHAT DEGREASING IS — A full description of what vapor degreasing is and what it will accomplish for you.

HOW DEGREASERS WORK — A series of photographs and written description shows what happens in the degreasing process.

DEGREASER APPLICATIONS — Illustrates number of different applications of degreasers to solve metal cleaning problems in various industries.

COMPLETE LINE OF STANDARD DEGREASERS — Describes Phillips' full line of standard equipment, including batch type, combination, rotomatic, and conveyorized models.

SPECIALLY ENGINEERED UNITS — Tells about Phillips' service in designing special degreasing units for solving unique metal cleaning problems.

Phillips 3463 Touhy Avenue • Chicago 45, Illinois
MANUFACTURING COMPANY
Engineered Metal Cleaning Equipment

▲ For more details circle NED-5336 on enclosed inquiry slip ▲

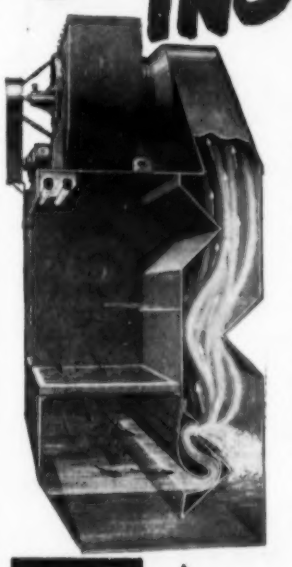
GET BETTER PRODUCTION HEATING with WATLOW HOT PLATES

For many heating and pre-heating operations requiring wide range of accurately controlled temperatures . . . Surface plate is highly polished steel—no plating to flake off. Leveling feet. Rectangular shapes in almost any size to order. Controls for temperatures up to 550° F, 3—heat snap switches for 550° to 750°.

WATLOW ELECTRIC MFG. CO.
Since 1922—Designers and Manufacturers of Electric Heating Units
1374 FERGUSON AVE.
SAINT LOUIS 14, MO.

▲ For more details circle NED-5337 on enclosed inquiry slip ▲

SAFETY INSURANCE for Magnesium Finishing



AAF'S Type N ROTO-CLONE Bench provides complete control of toxic or hazardous dust. This down-draft ventilated workbench performs all three functions of exhausting, collecting and storing dust in one compact unit. Safety factors include no moving parts, pumps or collecting surfaces, and dust storage under water level. Write for Engineering Bulletin No. 277A.

AAF American Air Filter COMPANY, INC.
391 Central Avenue, Louisville 8, Ky.
American Air Filter of Canada, Ltd., Montreal, P. Q.
Pacific Division Office, San Francisco, California

▲ For more details circle NED-5338 on enclosed inquiry slip ▲

ALL INFORMATION, METHODS, AND IDEAS NEEDED TO PRODUCE *BETTER TOOLS AND DIES*

Practical Data on Popular Analyses of Tool Steels, their Selection, Heat Treatment, and Use

in the Revised, Enlarged SIXTEENTH PRINTING of this

TOOL and DIE STEEL HANDBOOK

By Palmer and Luerssen

Here's the BOOK OF ANSWERS for every man responsible for tools and dies. Shows you how to increase your company's production from present equipment—how to reduce toolmaking trial and error, conserve tool steel, avoid die troubles, simplify heat treatment. Gives complete working information on everything from selection of the right steel to heat treating methods and equipment, hardness and toughness testing, latest data on high speed and hot work steels. 564 pages, 355 charts, photos, diagrams give you facts on: how design affects heat treatment, hardenability tests, time required to heat different tools to required hardening and drawing temperatures, furnace atmospheres, quenching, tempering, trouble-shooting.

INCLUDING 80-PAGE ALPHABETICAL SELECTOR, BOUND RIGHT IN THE BOOK, SHOWING WHICH STEEL TO USE FOR ALMOST EVERY TOOL AND DIE. Use this book to train new men and upgrade skilled men.

OVER 100,000 COPIES IN USE! CLIP AND MAIL NOW

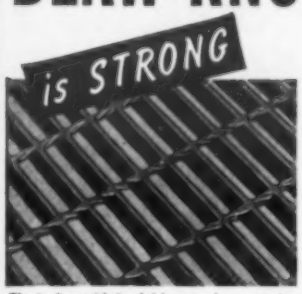
THE CARPENTER STEEL CO. • READING, PA. • DEPT. 19X-2

Please send me, postpaid, your revised "Tool Steel Simplified". I enclose $2.00 ($2.50 outside U.S.A.) in full payment of the book.

NAME _____ TITLE _____
FIRM NAME _____
MAILING ADDRESS _____
CITY _____ STATE _____
(Please print)

▲ For more details circle NED-5339 on enclosed inquiry slip ▲

BLAW-KNOX GRATING



Electroforged into rigid, one-piece panels.

Twisted cross bar prevents slipping.

...GIVES BETTER SERVICE ON 5 COUNTS

1 SAFER FOOTING
2 GREATER STRENGTH
3 LONGER LIFE
4 LOWER MAINTENANCE
5 MORE OPEN SPACE

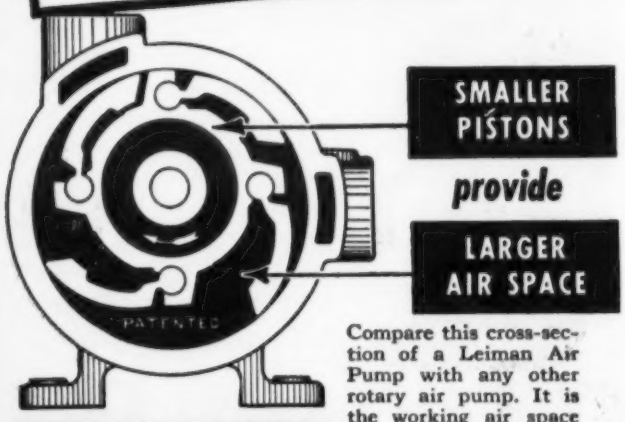
Bring your open steel flooring problems to Blaw-Knox for expert help. Bulletin 2365 sent on request.

BLAW-KNOX DIVISION of Blaw-Knox Company
2068 Farmers Bank Bldg., Pittsburgh 22, Pa.

BLAW-KNOX Electroforged® STEEL GRATING

For more details circle NED-5340 on enclosed inquiry slip

LEIMAN AIR PUMPS GIVE YOU Greater Capacity!



HINGED WINGS take up their own wear

Compare this cross-section of a Leiman Air Pump with any other rotary air pump. It is the working air space that counts—and Leiman provides 2 to 3 times more area, per size and weight of pump.

Handle air pressure, vacuum or suction jobs with much smaller Leiman Rotary Air Pumps. You save weight and space—run at lower r.p.m.—have fewer moving parts—no springs, gaskets or packings—no tips to renew—nothing to give trouble. Leiman patented leak-proof hinged wings maintain fully-rated pressure or vacuum for years and years.

What is your air application?

Send us details. Leiman engineers offer over 60 years' experience with thousands of air applications.

Catalog and Application Data sent on request. For Pumps—write DEPT. A

LEIMAN Rotary AIR PUMPS (Pressure—Vacuum)

Metal Cleaning and Finishing without acids or scratch brushes

Fast, low-cost, safe, uniform!

LEIMAN SANDBLASTS

Clean up scaly, rusty, rough surfaces—prepare better surface for plating, enameling or painting—stencil letters and designs—more rapid matte or satin finishes. Use unskilled help. Many models, treadle or automatic.

For Sandblasts—write DEPT. B

LEIMAN BROS., Inc. 167 Christie Street, Newark 5, N. J.

AIR PUMPS • AIR MOTORS • SAND BLASTS • DUST COLLECTORS

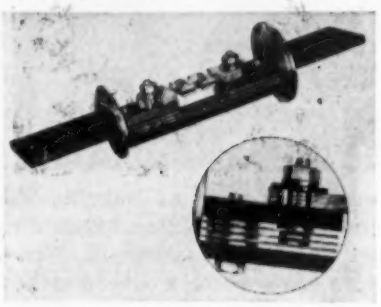
For more details circle NED-5341 on enclosed inquiry slip

TINNERS FURNACE is lightweight and portable

Lightweight and portable, the Torrid tinners furnace uses gasoline for fuel and can be ready to operate within 5 minutes. Used by tinners, roofers, metalworkers, plumbers and maintenance men, unit has cast horse shoe burner that produces hot blue flame. It operates efficiently inside or outdoors and in all kinds of weather. Made by **J. D. Polis Mfg. Co.,** 3439 W. Ogden Ave., Chicago 23, Ill.

For more details circle NED-5342 on enclosed inquiry slip

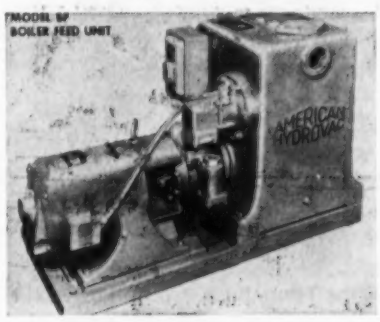
KNIFE BLADE FUSES have fins for cool operation



Design improvement incorporated in line of 600 amp, 250-v and 400 and 600 amp, 600-v renewable knife blade fuses consists of six large area brass heat dissipating fins, three spaced equally along each end of fiber bar support. Increased heat transfer surface results in cool fuse operation for long life. Fins also keep heat away from fiber bar, thus maintaining internal strength for accurate alignment. They lend support to fiber bar as well. Made by **Monarch Fuse Co.,** 112 E. First St., Jamestown, N. Y.

For more details circle NED-5343 on enclosed inquiry slip

BOILER FEED UNIT for up to 150-psi service



Self-contained single or duplex Lifetime boiler feed unit features cast iron receiver and base, McDonnell & Miller make-up feeder, built-in strainer, nonoverloading turbine feed pump and ease of servicing. Sizes with capacities to handle from 5 to 30 boiler hp are available for up to 150-psi service. Made by **Pitz Foundry, Inc.,** American Hydrovac Div., 290 Scholes St., Brooklyn 6, N. Y.

For more details circle NED-5344 on enclosed inquiry slip

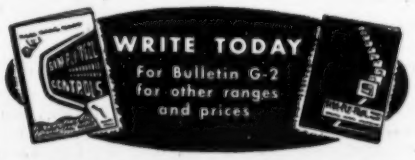
AUTOMATIC PYROMETER CUTS COSTS

Cat. #4531 Range 0-2500° F $125.50

DIRECT CONTACT
•
CONTINUOUS ON & OFF or AUTOMATIC SHUT OFF & ALARM

For HEAT CONTROL in Furnaces, Ovens, Kilns, Liquids

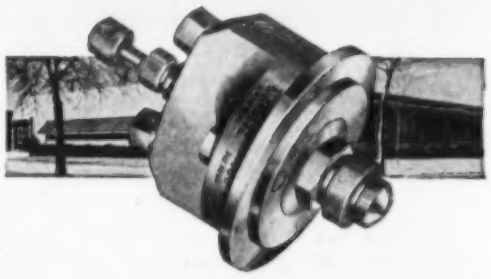
Now! Change to fully automatic heat control with this direct contact pyrometer. Save critical manpower! Eliminate human error. Nine temperature ranges from —200° F to 3000° F. Standard circuits and parts for simple, low-cost servicing.



ASSEMBLY PRODUCTS, INC.
Main at Bell Streets Chagrin Falls 4, Ohio

For more details circle NED-5345 on enclosed inquiry slip

to the 99 plants in 100 who use SPRAY NOZZLES



WRITE FOR

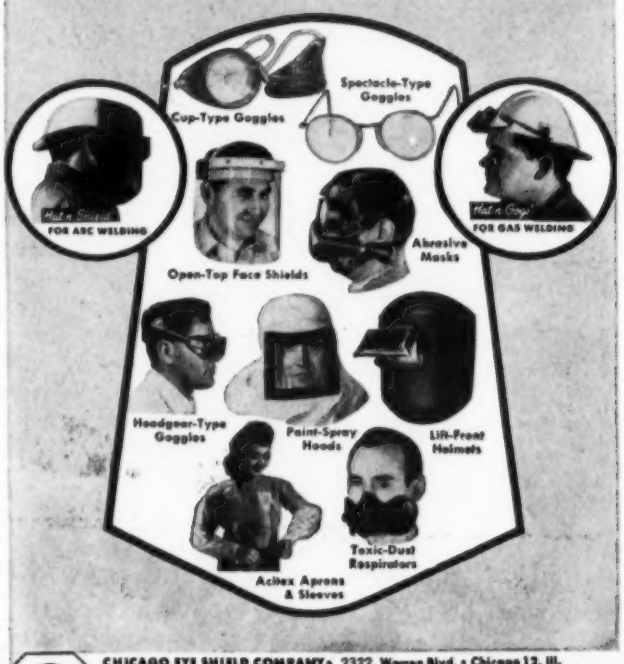
In the search for doing things better and faster, have you overlooked the importance of spray nozzles? Your application may be commonplace or complex . . . but whatever it is, properly engineered spray nozzles can make a vast difference. Let Spraying Systems Co., America's foremost authority on industrial spray nozzles show you why and how. As a first step, write for catalogs.

SPRAYING SYSTEMS CO.
Engineers and Manufacturers
3211 Randolph Street
Bellwood, Illinois

Catalog No. 22
General Industrial Spray Nozzles
Catalog No. 23
Pneumatic Atomizing Nozzles

For more details circle NED-5346 on enclosed inquiry slip

CESCO RIGHT... before your Eyes!



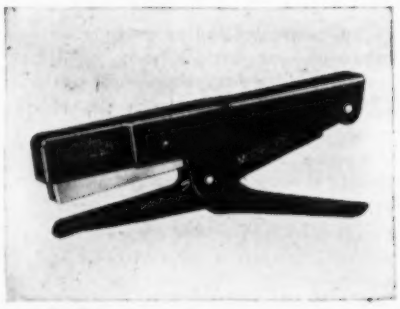
CHICAGO EYE SHIELD COMPANY • 2322 Warren Blvd. • Chicago 12, Ill.

CESCO FOR SAFETY

OFFICES IN: Atlanta, Birmingham, Boston, Buffalo, Cincinnati, Cleveland, Columbus, Detroit, East Orange, Houston, Kansas City, Knoxville, Little Rock, Los Angeles, Mexico City, D. F., Milwaukee, Montreal, Philadelphia, Pittsburgh, Salt Lake City, San Francisco, Spokane, St. Louis, St. Paul, Toledo, Tulsa

For more details circle NED-5347 on enclosed inquiry slip

FASTENING — Stapling pliers now get more power from less effort on more jobs



Bostitch P6 Stapling Pliers have scientifically engineered cam-and-roller action that drives and clinches 3/8" staples through work up to 1/4" thick. 1/4" staples are available for thinner work. Staples can be applied up to 2 5/8" in from edges.

Three models cover a wide range of applications.

P6-8 uses .050 x .019 wire staples on materials that are not easy to penetrate, such as multi-wall bags, canvas, corrugated board, flexible corrugated wrappings, and other materials requiring a broad wire for great holding power.

P6-6 uses .026 x .019 wire staples on materials of moderate weight, such as heavy paper bags, thick groups of correspondence or records, and a lot of jobs beyond the capacity of a desk-type stapler.

P6-12 uses .019 round wire staples on easy-to-penetrate materials where the strong, plier-type action is an advantage over other stapling tools.

Serves also as a tacker. Ask for Bulletin 201.

BOSTITCH®
740 Mechanic Street, Westerly, Rhode Island

For more details circle NED-5348 on enclosed inquiry slip

This Combination Gives You 3 PLUS-Performance Features

IN 1 ASSEMBLY OPERATION . . .

THERE'S A T&B ENGINEERED PRODUCT for every wiring job in the complete T & B line of fittings for all conductors and raceways

Just close the jaws of these new SHURE STAKE Tools* on T & B Self-Insulated Sta-Kon Terminals†. In a single operation, you get: (1) an electrically sound, mechanically strong joint; (2) firm gripping of wire insulation; (3) terminal insulation that prevents shorts—without an extra insulating operation.

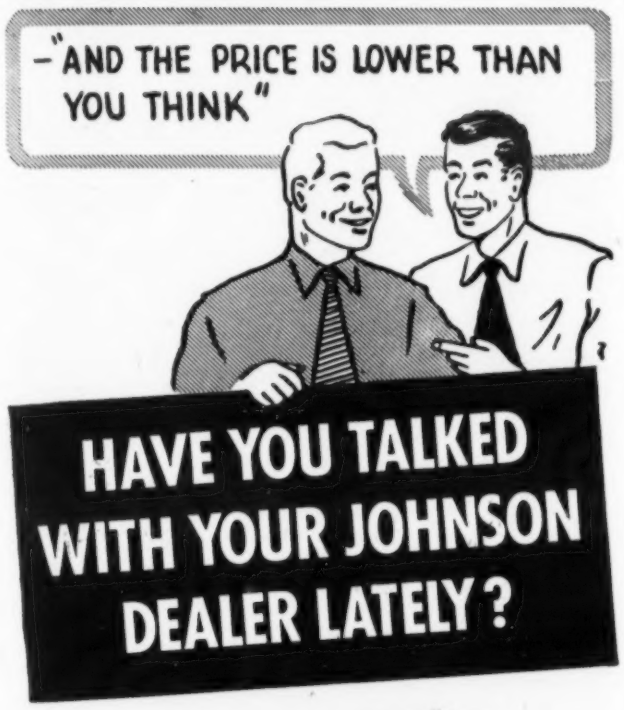
Tool handles are color-coded to conform to color-coding of terminal insulation. Three designs meet all assembly requirements: WT-143 for RA and RB terminals; WT-144 for RC; WT-141, adjustable for all three sizes. Write for details.

Engineered Right—Distributed Right. These new SHURE STAKE Tools are typical of all T & B products designed for outstanding performance at lowest cost. Furnished 100% through T & B distributors under the T & B Plan.

*Patents Pending †Patented

THE THOMAS & BETTS CO.
INCORPORATED
24 BUTLER STREET, ELIZABETH 1, NEW JERSEY
Manufacturers of Electrical Fittings since 1898
Originators of self-insulated solderless terminals in 1935

For more details circle NED-5349 on enclosed inquiry slip



Model J, 10" x 18" capacity. Available as a wet or dry cutting machine.

If you are in need of a band saw, find out now about the low cost of a Johnson Metal Cut-Off Band Saw. You'll find the investment surprisingly small, especially when you consider the many profitable uses it has in both large and small plants. The adaptability and flexibility of a Johnson Saw is almost unlimited: Rods, Tubes, Angles, Heavy Rounds or Flats, all can be cut quickly and economically. Only a minute or two for set-up; cutting action fast; smooth quiet Cuts, with unbelievable accuracy.

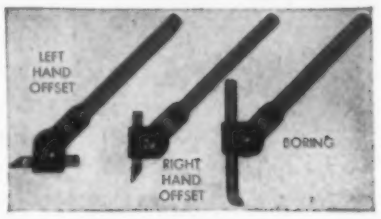
Junior Model B (with or without casters) 5" x 10" capacity.

THERE IS A DEALER NEAR YOU

JOHNSON MANUFACTURING CORP.
ALBION, MICHIGAN

For more details circle NED-5350 on enclosed inquiry slip

TOOL HOLDER
holds square bits, round boring bars



Versatility of operation is incorporated into the Walton-American tool holder through design feature which allows head to swivel in a complete circle. Holder, formerly made by American Stay Co., grips both square bits and round boring bars and can be set for any straight, right or left hand offset position. Bit is gripped at top and bottom and is held so that no lateral motion is possible. It is made in four sizes for tool bit capacities ranging from 1/8 to 7/16-in. Made by **Walton Co.**, P. O. Box 205, Elmwood Branch, Hartford 10, Conn.

For more details circle NED-5351 on enclosed inquiry slip

MAGNETIC PROBE
removes foreign ferrous materials

Strength of this magnetic probe can be controlled by turning a knob which varies the amount of magnet extension from its fountain pen size case. Use can be for removing steel or iron particles from areas where such foreign matter is harmful, such as in instruments, holes and storage bins. Other uses include testing of surfaces for magnetic properties and removing steel splinters from eyes or skin of employees. Probe can be sterilized without harming the magnet. It has pocket clip and sells for $6.50. Offered by **General Scientific Equipment Co.**, 2701 W. Huntingdon St., Philadelphia 32, Pa.

For more details circle NED-5352 on enclosed inquiry slip

AIR OPERATED DRILL
has 150 to 600 rpm speed range

Drilling, reaming and countersinking up to 2¼ in. is possible with air powered model Togglebug drill, especially handy for field operations where electric power is not available. Drill has standard commercial air motor with variable spindle speeds ranging from 150 to 600 rpm. It operates on 100 psi and consumes 150 cu ft of air at maximum load. A ¾-in. line should be used for adequate air supply. Made by **Guibert Steel Co.**, P. O. Box 1837, Y-Ave., Pittsburgh 30, Pa.

For more details circle NED-5353 on enclosed inquiry slip

Here's an AMAZING BRAND NEW SAFETY SIGN that will be welcomed by Safety Men! Brady Safety Signs stick to wood, glass, metal, concrete, etc. without moistening. May be applied to any clean surface in a jiffy. No screws, nails, bolts or skilled help necessary. All you do is peel from card, apply where wanted and the sign is up to stay.

Brady Safety Signs are made of durable cotton cloth, Silicone Coated to resist dirt, grime and moisture. CONFORM TO ASA Standard Z35.1-41. Select your requirements from a complete catalog of standard safety messages. Cost only a few cents per sign. Immediate delivery. Specials made to order.

WRITE FOR Free SAMPLES AND USEFUL CATALOG

WIRE MARKERS · PIPE MARKERS · SAFETY SIGNS · PRINTED "SCOTCH" TAPE · MASKS & STENCILS

MANUFACTURERS OF SELF-STICKING PRODUCTS
W. H. BRADY COMPANY
1669 E. SPRING STREET • CHIPPEWA FALLS, WIS.

For more details circle NED-5354 on enclosed inquiry slip

Hammond of KALAMAZOO says WET

ABRASIVE BELT GRINDERS—POLISHERS

ABRASIVE BELTS
- CUT COOLER
- CUT FASTER
- DO NOT DISCOLOR OR BURN WORK
- IMPROVE FINISH
- STEP UP PRODUCTION

Model VH-6 — WET-n-DRI, 6" Abrasive Belt Grinder-Polisher, Vertical or Horizontal Operation. Independent coolant unit or water main connection.

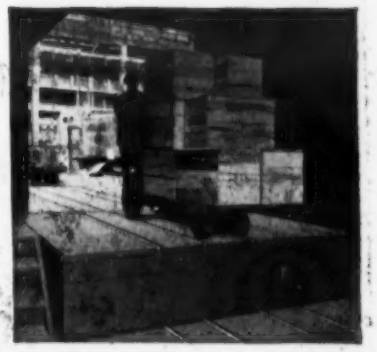
Model 400 — WET-n-DRI, 4" Abrasive Belt Grinder-Polisher. Floor or Bench Models. Independent coolant unit or water main connection.

Hammond Machinery Builders INC.
1623 Douglas Avenue • Kalamazoo 54, Michigan

For more details circle NED-5355 on enclosed inquiry slip

Globe Ramp Eliminator

Keeps Plant Traffic on the Level



A Globe Ramp Eliminator averts the dangers of makeshift gangplanks and provides safe, dependable, and fast vertical transportation between levels. This means less risk of damage to materials or injury to workers.

With a Globe Ramp Eliminator, movement of materials always is across a sturdy, safe, level platform instead of up or down steep or temporary makeshifts. This adds up to safer, faster, easier, and cheaper handling of goods.

GIVE *YOUR* BUSINESS A LIFT!

A Globe OiLIFT will help you make the most of your manpower . . . speed production, save you money, help eliminate damage to materials and injury to workers. Write *today* for valuable information on Self-Leveling Ramps, Machine Loading Lifts, Industrial Truck Service Lifts, Production Lifts, etc. Ask for Bulletin NE417A.

GLOBE HOIST COMPANY • 1000 E. Mermaid Lane, Phila. 18, Pa.
Factories at Des Moines, Iowa, and Philadelphia, Pa.

For more details circle NED-5356 on enclosed inquiry slip

WANT 2 or 2,000,000?

Do you need small tube-like parts with an unusual *combination* of properties? Do you need them in big quantities? Investigate the speed and ease with which Synthane laminated plastics can be machined on automatic screw machines—in your shop, or in ours. Mail the coupon today for complete information about Synthane fabrication facilities.

SYNTHANE

Manufacturers of laminated plastics
SHEETS
RODS • TUBES
MOLDED-LAMINATED
MOLDED-MACERATED
FABRICATED PARTS

SYNTHANE CORPORATION
North East River Road, Oaks, Pa.

Gentlemen:
Please send me without delay, or obligation, the Synthane Machining Folder.

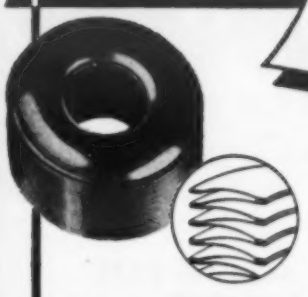
Name _____
Address _____
City _____ *Zone* ____ *State* _____

For more details circle NED-5357 on enclosed inquiry slip

Can You Use

BELLMETS?*

*Metallic Diaphragm BELLOWS with Specific Mechanical, Electrical and Thermal Properties



- Convolutions electrically insulated from each other
- Contour construction to resist pressures exceeding 500 PSI
- Materials heat resistant to 500° F.

Bellmets represent a unique development in welded diaphragm bellows. All welds either on the inside or outside diameter (depending on whether operating pressure is to be internal or external) are replaced with a dielectric bonding material. The bonds are strong, slightly resilient, highly resistant to heat, and insulate each end of the bellows from the other.

Bellmets have already solved problems in engine noise attenuation, pressure switch simplification, circuit control at high pressures. Wherever heat, pressure, or electrical characteristics present a problem, job-engineered Bellmets—in a wide range of sizes and specifications—may prove the ideal solution.

WRITE TODAY for complete information, outlining your specific problem or interest.

BREEZE CORPORATIONS, INC.
41 South Sixth St., Newark, N. J.

ANOTHER BREEZE MARK PRODUCT

For more details circle NED-5358 on enclosed inquiry slip

FIRST
IN FABRICATING "KNOW-HOW"

TEFLON*----KEL-F

And the Most Modern Facilities for Rapid, Low-Cost, Close-Tolerance Production

The United States Gasket Company began fabricating TEFLON, years ago when it was first offered commercially, and has pioneered its application to countless purposes throughout industry. You profit from this unusual experience and "Know-How," when you specify "TEFLON or KEL-F—fabricated by the United States Gasket Co."

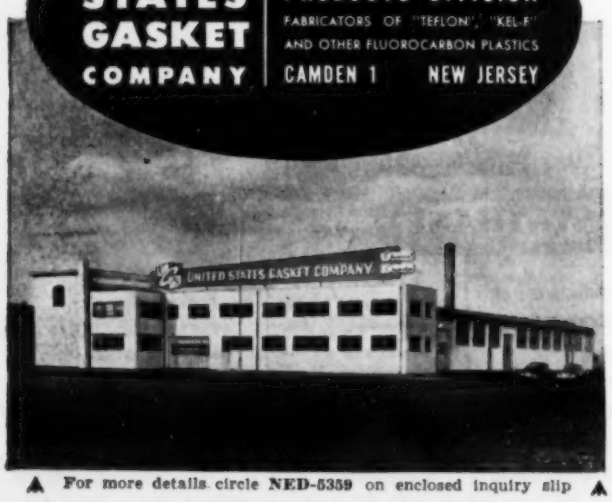
You can be sure of uniform high quality, accuracy of dimensions, prompt attention to your requirements whether on stock (the most complete line in the country), or on custom machined or molded parts.

Get the advantages of these fluorocarbon plastics—fabricated by U.S.G. The finest dielectrics especially for high frequency service, chemically inert, non-contaminating, non-gassing, zero water absorption, unaffected by humidity, tough, resilient, serviceable from −110°F. to 500°F. without change in critical electrical or physical characteristics. Write for Bulletin No. 300.

*duPont's trademark for its tetrafluoroethylene resin

UNITED STATES GASKET COMPANY

FLUOROCARBON PRODUCTS DIVISION
FABRICATORS OF "TEFLON", "KEL-F" AND OTHER FLUOROCARBON PLASTICS
CAMDEN 1 NEW JERSEY



For more details circle NED-5359 on enclosed inquiry slip

DETACHABLE LINK V-BELT
can be run in either direction

Because any desired length can be made up to fit application, detachable V-Link belting in four standard widths replaces 315 standard sizes of endless V-belts. It is prestretched, will not slip and can run in either direction. Because it does not become distorted, belt operates without vibration at top speeds. Multi-ply links are uniform in camber and dimension and are made of tough woven cloth impregnated with heat and oil resistant rubber. Convex stud head has long service life. Made by **Brammer Co.**, Dept. NED, 684 Broadway, New York 12, N. Y.

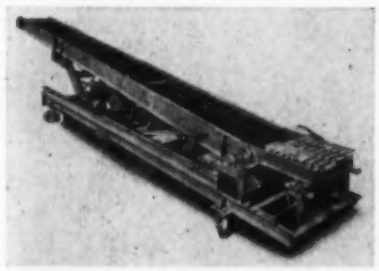
For more details circle NED-5360 on enclosed inquiry slip

SAFETY GOGGLES
variety of types available

Chipper's, welder's, dust and splash types are included in line of cup type goggles which feature wearer comfort. Cups are individually molded to fit right and left eye areas of face, with smooth, wide-bearing facial contact surfaces. Over 300 perforations in side shield allow ample air circulation. Cups are unaffected by moisture or perspiration. Ball-chain nose bridge is adjustable. Lens rings are free-turning for easy changing. Wide range of protective lenses is available. Made by **Fendall Co.**, 4633 N. Western Ave., Chicago 25, Ill.

For more details circle NED-5361 on enclosed inquiry slip

DRUM UNLOADER
usable in box or gondola cars



Unloading of drums from box or gondola railroad cars is simplified by this portable power-driven belt conveyor of the slider bed type. For gondola cars, boom is raised hydraulically and can be set at any height. Short roller apron receives the drums or transfers them to another conveyor. Length is 22 ft, and maximum inclination of boom is 11 degrees from horizontal. Belt speed of 40 fpm is supplied by 1-hp motor through enclosed speed reducer. Made by **Alvey Conveyor Mfg. Co.**, 9259 Olive Street Rd., St. Louis 24, Mo.

For more details circle NED-5362 on enclosed inquiry slip

METAL DISINTEGRATION!
by THOMAS METALMASTER

TOOL STEEL CUTTING · TOOL & DIE REPAIRS · TAP REMOVAL · DRILL PULLING

WRITE TODAY!
There's a technical engineer in your area that'll give an on the spot demonstration in your plant at your convenience.

WARNER DIVISION:
CLINTON MACHINE COMPANY
21535 GROESBECK HWY.
DETROIT 5, MICHIGAN

For further technical information relative to the famous Thomas Metalmaster Disintegrators write to the main office listed above and prompt service will be given your inquiry.

For more details circle NED-5363 on enclosed inquiry slip

BENDIX FRIEZ

Bendix-Friez THERMISTORS

(NEGATIVE TEMPERATURE CO-EFFICIENT CERAMIC RESISTORS)

These temperature responsive resistors are useful as temperature measuring elements and as liquid level sensors; they are especially well suited to compensation where the circuit constants must be maintained irrespective of temperature changes. Since they are a fired ceramic, they are stable under practically all conditions and respond only to temperature changes.

Typical application in capsule form for temperature sensing of hydraulic oil.

Many other values can be obtained from standard diameter material. Because the thermistors are made in our own plant, under extremely careful control, special compositions, shapes, and resistance values, hermetically sealed or otherwise protected, can be made in any quantities to suit your individual requirements.

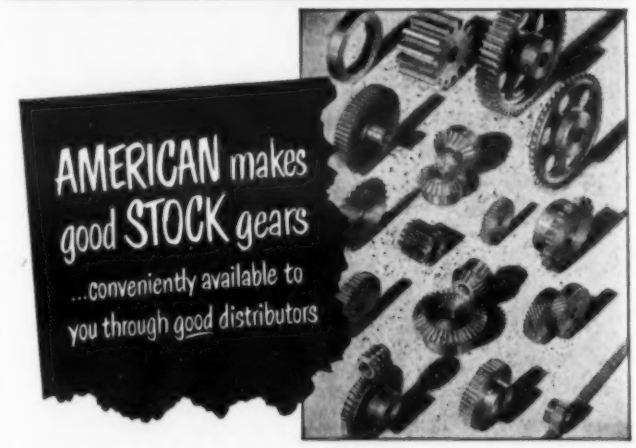
We invite your Inquiries Write Dept. I

BENDIX-FRIEZ STANDARD ROD TYPES

Size (inches)	@ +30°C.	@ 0°C.	@ −30°C.
.140 x ¾	45 ohms	88 ohms	193 ohms
.040 x 1.5	14,000 ohms	29,946 ohms	74,676 ohms
.018 x 1.5	40,000 ohms	94,040 ohms	262,400 ohms

FRIEZ INSTRUMENT DIVISION of Bendix AVIATION CORPORATION
1324 Taylor Avenue • Baltimore 4, Maryland
Export Sales: Bendix International Division, 72 Fifth Ave., N.Y. 11, N.Y.

For more details circle NED-5364 on enclosed inquiry slip



You'll find American STOCK Gears meet every requirement for high quality, accurate tooth contour, smooth, quiet performance and long life.

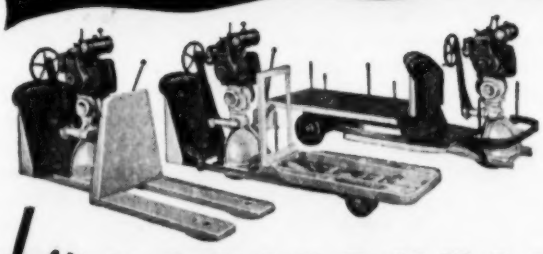
Complete line includes:
Spur Gears . . . Racks . . . Change Gears . . . Internal Gears . . . Miter Gears . . . Bevel Gears . . . Ratchets and Pawls . . . Spiral Gears . . . Worms and Worm Wheels.

Write us for name of distributor nearest you . . . Also request a free copy of Specification Catalog.

asg AMERICAN STOCK GEAR division
PERFECTION GEAR COMPANY • HARVEY, ILLINOIS

For more details circle NED-5365 on enclosed inquiry slip

truck-man



for HORIZONTAL Material Movement

Four models for LOW COST handling. Wisconsin powered, 360° turning, simple controls. Many get 8 hrs. per gallon. Pneumatic drive wheels, easy on floors, elevators, operators. Under 1000 lbs., rate up to 3500 lbs.
Model DF hydraulic Pallet Lift, ideal inter-plant and "feeder" to stackers. Rates 3000 lbs., 40" to 48" pallets. Maneuverable in narrow aisles.
Model D hydraulic Skid Lift. Safety controls start and stop 3500 lb. loads without jarring. Pneumatic drive wheels, 9" rubber load wheels cushion ride.
Model DT Platform Utility for manual loading. Carries mobile workshops, pipe, lumber, firefighting and maintenance equipment. Speedy, four pneumatic tires.
NEW TRUC-TOR pulls 13,000 lbs., weighs 990. Ideal for limited-load floors, docks, elevators. Anyone can operate. Specials built for unusual conditions. Write for 1952 catalog and name of your dealer.

truck-man Div. of The Knickerbocker Co.
627 LIBERTY ST., JACKSON, MICH.

For more details circle NED-5366 on enclosed inquiry slip

STANDARDIZE ON STANDARD

HALLOWELL®

CABINET BENCHES

Finest all-steel construction, smooth, rigid working surfaces, free-sliding, carefully fitted doors, and roller bearing drawers make HALLOWELL Cabinet Benches outstanding. Simple, functional design blends perfectly with industrial interiors. Standard unit accessories permit you to *custom build* HALLOWELL Benches to your requirements. Write for descriptive literature. STANDARD PRESSED STEEL CO., Jenkintown 24, Penna.

HALLOWELL SHOP EQUIPMENT DIVISION SPS JENKINTOWN PENNSYLVANIA

▲ For more details circle NED-5367 on enclosed inquiry slip ▲

ARE YOUR VALVES PERFORMING SATISFACTORILY IN SERVICES LIKE THESE?

CORROSIVE ACIDS, such as hydrofluoric, sulphuric and hydrochloric.

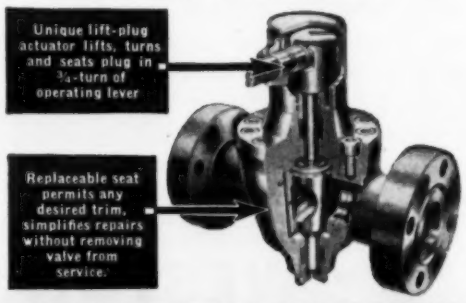
MOLTEN METALS—Temperatures to 1600° F.

VACUUM—Practically absolute.

HIGH WORKING PRESSURES—Up to 5000 pounds.

The remarkable Cameron Non-Lubricated Lift Plug Valve is handling these and many other difficult services with complete satisfaction. Combining the best features of gate and plug valves with a number of distinctive mechanical innovations (see cut), the Cameron Valve represents the first real advancement in valve design in many years. Low maintenance, ease of operation and pressure-tight closure without the aid of lubricants make this the outstanding industrial valve today. Literature gladly sent on request.

CAMERON IRON WORKS, INC.
P. O. Box 1212 Houston, Texas
Export: 74 Trinity Place, New York, N. Y.



Cameron NON-LUBRICATED LIFT-PLUG VALVES

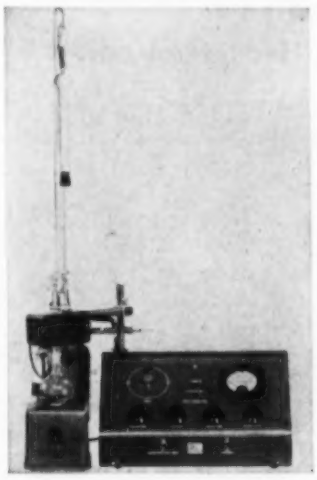
▲ For more details circle NED-5368 on enclosed inquiry slip ▲

REFRIGERATING SYSTEM portable unit has thermostat

Portability and thermostatic temperature control over a wide range of operation are combined in self-contained Junior Chil-er automatic recirculating industrial refrigerating system for cold water, brine and other liquid coolants. It is also available with a heating element for recirculation of hot water. System consists of air-cooled condenser, condenser motor, recirculating pump, pump motor, insulated liquid storage tank, thermostatic temperature regulator, starting switches and power cord, all enclosed in housing mounted on rubber-tired wheels. Seven models from ¼ to 3 hp have pump capacities from 1 to 10 gpm. Standard temperature ranges are 38 to 60° F with water; −10 to 38° F with brine; 60 to 140° F with heating element. Largest unit clears standard width doors. Made by **Mayer Refrigerating Engineers, Inc.**, P. O. Box 6, Rutherford, N. J.

▲ For more details circle NED-5369 on enclosed inquiry slip ▲

WATER CONTENT METER makes measurements automatically on various types of bulk materials



Aquameter, an instrument for the automatic measuring of water content in various products, uses the Karl Fischer technique to eliminate errors caused by temperature effects, oxidation and decomposition. Instrument consists of an electrically controlled titrating unit into which the sample is introduced. A knob on the control unit is set and the instrument completes the titration automatically in 1 to 2 minutes without further operator attention.

Most titrations can be reproduced to an accuracy within 0.5 per cent. Instrument also distinguishes between true and apparent end points and permits rapid and successive determinations without resetting controls or emptying sample container. Accuracy is independent of color, composition or turbidity of the solution. Operation is on 115 v, 50-60 cycle ac circuits. Made by **Beckman Instruments, Inc.**, Dept. 56, 800 Mission St., South Pasadena 5, Calif.

▲ For more details circle NED-5370 on enclosed inquiry slip ▲

FOR ALL INDUSTRIAL, TECHNICAL, AND COMMERCIAL USES

Pannier MARKING INKS

• You get the exact ink you need for clear, sharp, readable marking when you use the Pannier "Master Marker" line. For there's a Pannier Ink to mark nearly any kind of surface under almost any service condition. The wide range of properties of this complete line includes drying under oil; heat resistance; solubility in water and other fluids; permanency; etching or non-etching; and many others. Our laboratory will gladly recommend the right ink and method of application—even work with you in developing a special ink to meet unusual requirements. Just tell us your marking problem.

OFFICES: Chicago • Los Angeles • Youngstown • Philadelphia • Jacksonville

THE PANNIER CORPORATION
301 Pannier Building
Pittsburgh 12, Pa.

Export Dept.: Bessemer Bldg., Pittsburgh, Pa.

▲ For more details circle NED-5371 on enclosed inquiry slip ▲

one good crane led to another

...at Kilroy Structural Steel Co.

. . . And that is only part of their story. Another 74 foot overhead crane is on order for delivery to Kilroy.

For handling more tonnage faster, Kilroy, like many other industries, is "following the line of least resistance" by taking their materials handling problems to Robbins & Myers.

The Kilroy story—and a whole series of other solutions to handling problems are being published as *overhead handling case studies* by Robbins & Myers. To be assured of getting your copy, rip and clip this ad to your letterhead; tell us who you are, and your position please, and mail it to . . .

TAKE IT UP WITH

ROBBINS & MYERS INC

HOIST AND CRANE DIVISION, SPRINGFIELD 99, OHIO

▲ For more details circle NED-5372 on enclosed inquiry slip ▲

NEW IMPROVED TRI-SAW ALL-PURPOSE PORTABLE POWER HACKSAW

ZIPS THROUGH WOOD, SHEET METAL, HEAVY METAL, NAILS, PIPE, Etc., IN SECONDS!

NO INCREASE IN PRICE Only $37.50 Makes any cutting job easy, quick, economical!

Use this sensational time and work-saving tool and you'll say it is the best portable all-purpose saw on the market! Only Tri-Saw gives you all of these exceptional features:

- Fits ¼" or 5/16" h. d. drill
- Variety of blades for every cutting need
- Balanced pistol grip design
- Cuts directly into floors and walls without starting hole
- One shot lubrication
- Simple construction
- No side torque or spin

ATTENTION! JOBBERS AND DEALERS

Profitable possibilities for aggressive distributors. Write today for details.

MANUFACTURED BY
TRI-SAW CORPORATION
6611 CLAYTON ROAD • ST. LOUIS 17, MISSOURI

▲ For more details circle NED-5373 on enclosed inquiry slip ▲

CUT FINISHING COSTS 50%

HERE'S HOW: Make the easy profitable "Waste Barrel" test. Cut out a letter-size sample of used abrasive belt, picked at random from your plant waste barrel—include the belt joint, if possible. Send us your sample with completed coupon.

IN MOST CASES, after carefully analyzing your scrap sample, our experienced abrasive engineers can recommend a Jewel Brand Coated Abrasive Belt that will do a better job, faster . . . at greatly reduced costs. Numerous tests have shown that the proper selection of a Jewel Brand Belt can cut finishing costs *in half!* Worth trying?

HERE'S YOUR OPPORTUNITY to take quick action. Send us your test sample and completed coupon now. There is no obligation of any kind attached to this FREE OFFER.

ABRASIVE PRODUCTS, INC.
525 Pearl Street, South Braintree 85, Mass.

HELP me complete the Waste Barrel Test.
Enclosed is a sample of used belt from our plant.

NAME ..... POSITION .....
COMPANY .....
ADDRESS .....
TYPE OF PRODUCT ..... MATERIAL .....
WE USE APPROXIMATELY ..... BELTS PER MONTH
BELT LENGTH ..... BELT WIDTH .....

▲ For more details circle NED-5374 on enclosed inquiry slip ▲

RUBBER-TREADED!
Wears and grips like a tire

Grab-it

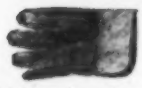
OUTWEARS 5 TO 10 PAIRS ORDINARY GLOVES

Tough Natural Rubber over palm and thumb. Far outwears costlier leather.

Sure Grip: Rough surfaced rubber firmly grips sharp-edged, abrasive or slippery materials, tools or equipment — wet or dry.

Strong Fabric Lining and back — comfortable as a canvas glove. Very flexible.

Easy To Slip On Or Off: Safety cuff, gauntlet or knitwrist — rubber coated palm or completely waterproof styles.



Double-palm glove, worn out laying 3000 fire bricks.

This Grab-it laid 15,000 bricks for the same worker.

FREE TEST OFFER. Send for sample gloves for on-the-job test . . . to improve safety and cut glove costs 40% to 70%.
Write, on your business letterhead, merely stating your job operation, materials handled and temperature condition. Without cost we will send you samples of the type glove best suited for your operation and simple guide for testing them on the job.

Edmont Mfg. Co., 1240 Orange St. Coshocton, Ohio
World's largest manufacturers of coated industrial gloves

▲ For more details circle **NED-5375** on enclosed inquiry slip ▲

small size

Yarway Impulse Steam Trap is hardly larger than a pipe union. Easily installed *anywhere.* ½" trap weighs 1¼ lbs.; 2" trap only 8½ lbs. Over 650,000 Yarway traps have been *proved on the job.* Sold by over 200 distributors. For name of nearest one, or free bulletin, write . . .

YARNALL-WARING CO., 131 Mermaid Ave., Phila. 18, Pa.

YARWAY IMPULSE STEAM TRAP

▲ For more details circle **NED-5376** on enclosed inquiry slip ▲

Move cartons, boxes, pans, crates, sheets without effort. Gravity does the work. Light in weight, easy to set up, easy to move.

Adaptable. Straight lengths and reversible, curved sections—adjustable stands and quick couplers. Many handy accessories for adapting conveyors to your job.

OLSON CONVEYORS for EVERY PURPOSE

Send for Catalog and case histories.

SAMUEL OLSON MFG. CO., INC.
2423 Bloomingdale Ave., Chicago 47, Ill.
Please send literature—
☐ Bulletin on Wheel Conveyors and Pallet Dollies
☐ Literature on OLSON Conveyors for every purpose
Individual_____ Title_____
Street_____
City_____ Zone____ State_____

▲ For more details circle **NED-5377** on enclosed inquiry slip ▲

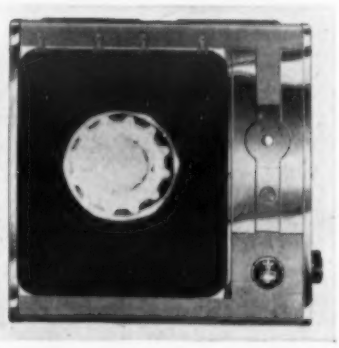
ALTERNATING CURRENT WELDERS
silicone-insulated units are made in 200, 300, 400 and 500 amp ratings

One of the main features of line of alternating current welders is their moisture and chemical vaporproof silicone insulation for high overload protection, lightweight design and prolonged welder life. Another is the combination of low open-circuit voltage with arc stabilization which provides an extra surge of current if arc starts to go out. This is accomplished by incorporating capacitors in secondary circuit and results in smooth performance and pop-out elimination.

Finally, the automatic hot-start makes arc striking easy by providing right amount of current boost to start arc at any current setting without manual adjustment. Hot-start device is simple relay and resistor combination connected across transformer secondary in series and is fully automatic. Controls of the mercury relay are sealed in and require no maintenance. Made in 200, 300, 400 and 500-amp ratings, welders are product of **Metal & Thermit Corp.,** 101 E. 41st St., New York 17, N. Y.

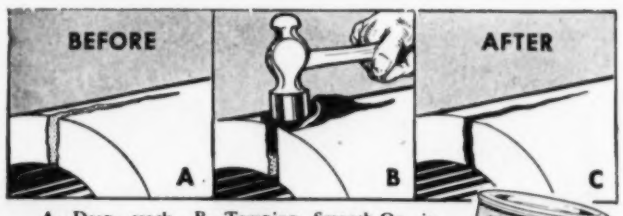
▲ For more details circle **NED-5378** on enclosed inquiry slip ▲

X-RAY ILLUMINATOR
is high-intensity industrial unit



Radiographs of thickest structures become plainly visible with this Keleket high intensity illuminator for x-ray film. Even light intensity, 20 times greater than that of standard viewers, is provided. Full 14 x 17-in. viewing surface accommodates large films. Critical examination of small areas is accomplished before a 3-in. spot of four times the overall intensity. Build-in adjustable mask is provided for the special viewing spot, and separate masks provide for viewing films smaller than overall area. Smooth roller clips hold film firmly without scratching. Cool front operation permits extended viewing without danger of curling or damaging film. Foot switch control, stepless voltage brightness control and use of standard photoflood lamps are other features. Made by **Keleket X-ray Corp.,** 225 W. Fourth St., Covington, Ky.

▲ For more details circle **NED-5379** on enclosed inquiry slip ▲



A—Deep crack. B—Tamping Smooth-On in. C—Crack completely sealed.

If You've Never Used SMOOTH-ON, *read this:*

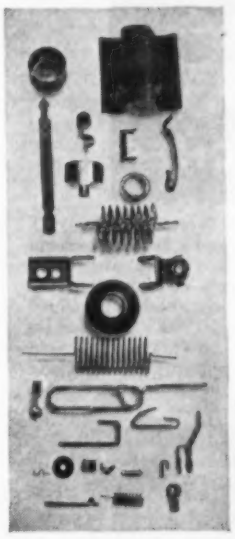
Smooth-On No. 1 Iron Cement is a metallic powder which you mix with water to the consistency of putty. You tamp it, while still soft, into a crack or hole, making sure to force it against all surfaces. With Smooth-On you don't need to use heat or special gadgets. As it hardens, it expands slightly, clinging tightly in place. The repaired part is ready for use as soon as Smooth-On sets hard. Keep Smooth-On handy for both emergency and routine maintenance repairs. Buy it in 7 oz., 1 lb., 5 lb., 20 lb., or 100 lb. size. If your supply house hasn't Smooth-On No. 1, write us.

FREE 40-PAGE REPAIR HANDBOOK
Shows many industrial and home repairs made with No. 1 and other Smooth-On Cements. Leaks stopped, cracks sealed, loose parts made tight. 170 illustrations. Drop us a line for YOUR free copy.
SMOOTH-ON MFG. CO., Dept. 10
570 Communipaw Ave., Jersey City 4, N. J.

Do it with SMOOTH-ON
THE IRON REPAIR CEMENT OF MANY USES

▲ For more details circle **NED-5380** on enclosed inquiry slip ▲

Priced Right!
WIRE FORMS
& *Metal Stampings*



High-speed, quality production with custom-made precision. Wire formed to any shape for every need.

IMMEDIATE CAPACITY FOR DEFENSE SUB-CONTRACTS
STRAIGHTENING & CUTTING
Perfect straight lengths to 12 ft.
.0015 to .125 diameter
WIRE FORMS
.0015 to .080 diameter
SMALL METAL STAMPINGS
.0025 to .035 thickness
.062 to 3 inches wide

Specializing in Production of Parts for Electronic and Cathode Ray Tubes

Write for illustrated folder. Send Blueprints or Samples for Estimate.

ART WIRE and STAMPING COMPANY
15 BOYDEN PLACE NEWARK 2, N. J.

▲ For more details circle **NED-5381** on enclosed inquiry slip ▲

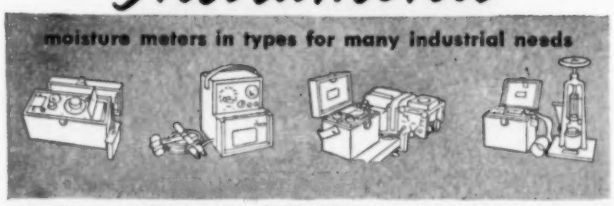
Portable MOISTURE METER
insures product uniformity...cuts costs!

TAG Midget MOISTURE METER

In the manufacture of coated abrasives, too much moisture in the backing material during processing, or too little moisture, can have costly consequences. Non-uniform flexing . . . paper delamination . . . mold . . . or even bonding failures. So this leading manufacturer checks moisture content every step of the way with simple, accurate TAG moisture meters. They state, "portable TAG meters have enabled us to attain a more uniform product, and eliminate product losses due to improper moisture content."

In many other products and processes, too, incorrect moisture content is costing real money. Why not consult with TAG on your moisture problems now. Or, ask for literature on the various types of moisture meters available . . . WESTON Electrical Instrument Corporation, 614 Frelinghuysen Avenue, Newark 5, N. J., *manufacturers of Weston and TAG instruments.*

WESTON *Instruments*



▲ For more details circle **NED-5382** on enclosed inquiry slip ▲

FREE BOOK SHOWS YOUR PAINT COSTS INSTANTLY

Gives Complete Record of What You Painted, When, Paint Brand, Quantity, Cost and Durability—

GET IT NOW!

Here's the quick, convenient way to keep performance and cost records of every maintenance paint job on buildings and equipment. No more "guesstimating" on what to use, how much; or trying to recall dates or brands. Complete data is right here at your fingertips on every unit for years to come. It is *your* guide to better buying of brands and quantities—to saving money! The more paint you use the more important this record becomes!

FREE! This 8½ x 11, 24-page Paint Record Book is free to heavy-duty maintenance paint users. Your letterhead request brings your copy FREE and without obligation. Send for yours now, while they last—write today!

THE TROPICAL PAINT & OIL CO. SINCE 1883
1124-1282 W. 70th Street • Cleveland 2, Ohio

▲ For more details circle NED-5383 on enclosed inquiry slip ▲

Get the facts on TUFF-TEX*

This modern, economical greaseproof floor tile is manufactured especially for industrial plant use. It's the answer to *many* factory floor problems because it *stands up* beautifully to nearly every kind of wear and tear a factory floor must face!

A really *heavy-duty* floor tile...Tuff-Tex withstands material handling truck traffic with ease.

And it is especially recommended for machining areas where grease and oil abuse is heavy.

Send today for your free copy of "TUFF-TEX Greaseproof Industrial Flooring"...a folder that shows all the Tuff-Tex colors...gives full information and specifications.

THE TILE-TEX DIVISION, *The Flintkote Company, 1234 McKinley Street, Chicago Heights, Illinois.*

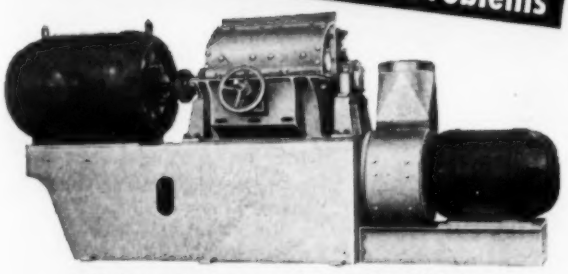
The Flintkote Company of Canada, Ltd., 30th Street, Long Branch, Toronto, Canada.

*Registered Trademark, The Flintkote Company

TUFF-TEX...*Greaseproof Industrial Tile*

▲ For more details circle NED-5384 on enclosed inquiry slip ▲

DIXIE® PROCESS GRINDERS Solve Today's Production Problems



Dixie Process Grinders are available in 15 to 250 H. P. capacities for a large variety of grinding applications.

The sure-fire remedy for processors in today's production difficulties is the Dixie Process Grinder. Rugged and dependable, the Dixie grinds better . . . faster . . . at less cost. Manufacturers who set the pace are solving the urgent industry problem of production versus manpower with Dixie Process Grinders.

Plan now to cut your grinding costs . . . step up capacity...improve quality...increase sales and profits. Write today for all the money-saving facts.

JOHN J. WOODS & SONS
320 Board of Trade • Kansas City 6, Mo.

▲ For more details circle NED-5385 on enclosed inquiry slip ▲

BOLT & WIRE CUTTERS
drop forged for strength, rigidity

An improved line of bolt and hot wire cutters, strap shears and sheet metal hand tools formerly made by Helwig Mfg. Co. are now available with heat-treated drop-forged handles, plates and jaws for strength and rigidity. Because they are full-forged, side plates cannot twist. Gear principle of achieving leverage affords simplicity in design. Helwig replacement parts, as well as complete line of 18 major tools, including four sizes of bolt and rivet cutters, are being offered for immediate delivery by **Interstate Drop Forge Co.**, 4051 N. 27th St., Milwaukee 9, Wis.

▲ For more details circle NED-5386 on enclosed inquiry slip ▲

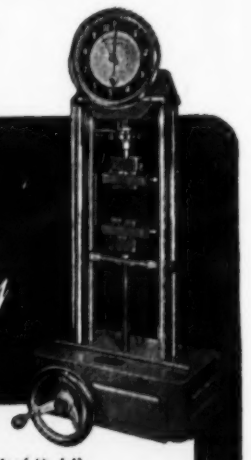
SOFT DRINK DISPENSER
mobile or stationary units serve variety of drinks

Mighty Midget combination multiple soft drink dispensers can be used on wheels or casters, on food wagons, or carts, or for permanent installation. Water and electric facilities are not required. Model E offers choice of four carbonated or noncarbonated drinks, high and low pressure soda and drinking water dispensed from seven-stream faucet. One, two and three-drink models are available. Stainless steel faucet, exterior and interior, fiber glass insulation, copper water cooling coils and stainless steel syrup cooling coils are incorporated. Designed for use in limited space, the 18 x 13 x 19¾-in. unit is supplied from syrup tanks placed in available space nearby. Equivalent of 60 cases of 6-oz bottles can be dispensed per filling. Refrigeration is by ice.

Self-contained model J unit, illustrated, has electric refrigeration, measures 20 x 25½ x 42 in., has similar construction features and will serve two, three or four flavored drinks, plus high and low pressure soda and drinking water. Distributed by **Jule Johnson & Co.**, Dept. NE, 8631 California Ave., South Gate, Calif.

▲ For more details circle NED-5387 on enclosed inquiry slip ▲

DO YOUR OWN TESTING
...tensile, compression, transverse or shear



DILLON Universal Tester saves *Time and Money*

Average operator can make hundreds of tests *(Standard Model)* a day on spot welded specimens, riveted assemblies, plastic, wire, rubber, cloth, etc.

These portable testers easily handle flat, round or special shapes with extreme accuracy. Perfect for lab or shop. Manual or motorized. Will test materials with tensile strength as low as .25 pounds or as high as 125,000 pounds P. S. I.

Write today for free Tensile Strength Computer and illustrated folder with detailed information.

W. C. DILLON & CO., Inc.
1421 NE SOUTH CIRCLE AVENUE • FOREST PARK, ILLINOIS

▲ For more details circle NED-5388 on enclosed inquiry slip ▲

HOPPER TYPE WATER JET EDUCTOR
pumps sludges, slurries, and granular solids

SK Hopper Type Eductors operate on jet principle. Water, under pressure, passes through eductor nozzle into eductor chamber where it entrains slurry or granular solids from hopper and discharges through venturi of eductor into piping system. Agitating jets in hopper wash material down into eductor chamber. Photo shows SK Hopper Type Eductor in Sun Oil Company refinery. Sun Engineers mounted eductor on rolling platform and use it to convey spent filter clay from filter shells to settling basin outside plant. Literature on SK Eductors is available on request to:

SCHUTTE AND KOERTING CO.
28 State Road, Cornwells Heights, Bucks County, Pa.

▲ For more details circle NED-5389 on enclosed inquiry slip ▲

FACTS ABOUT BEARING DESIGN to help you select the *Best A-c. Motor*

All in this one Bulletin

15-POINT COMPARISON CHART
STATEMENTS BY BEARING MANUFACTURERS
CUTAWAY DRAWINGS AND PHOTOS

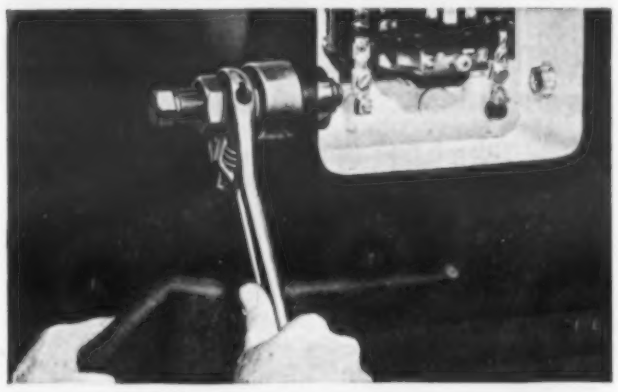
RELIANCE Precision-Built MOTORS

Call your nearest Reliance Sales Representative or write us direct for your free copy of this fact-filled bulletin on the vital differences in the bearing designs of A-c. motors. Ask for Bulletin B-2201.

RELIANCE ELECTRIC AND ENGINEERING CO.
1082 IVANHOE ROAD • CLEVELAND 10, OHIO

Sales Representatives in Principal Cities

▲ For more details circle NED-5390 on enclosed inquiry slip ▲



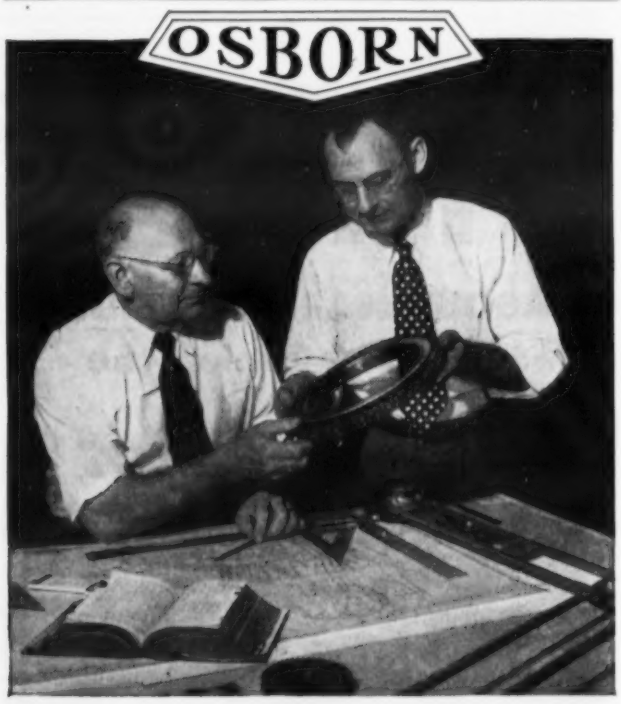
Accurate "clean" openings for conduit easily made in 1½ minutes or less

Speed conduit installations with GREENLEE Knockout Punches and Cutters. Eliminate time-wasting drilling and filing to enlarge holes. Do the job in 1½ minutes or less with these GREENLEE tools that cut smooth holes up to 4" to accommodate conduit in sizes ranging from ⅜ to 3½". Do the job neater, faster, easier, this way.

GREENLEE

GET FACTS TODAY on all four types of Greenlee Knockout Punches and Cutters and Greenlee Hydraulic Knockout Punch Driver. Greenlee Tool Co., 1946 Herbert Ave., Rockford, Illinois

For more details circle **NED-5391** on enclosed inquiry slip



Board of strategy for your "Operation Push Button"

Your need for mechanization today finds a powerful ally in the machine design talents of Osborn.

When your **O**sborn **B**rushing **A**nalyst recommends the latest in "push-button" brushing methods to solve your cleaning and finishing problems he is backed by experienced engineers and craftsmen—research men, designers and production men who serve you these ways: (1) They develop basic brushing methods to solve your problem. (2) They help your engineers or your machine builder to design the right brushing machine for you. (3) If desirable, they even design the brushing machine for you and supervise its construction. The proper approach depends on *your* needs. The main thing is:

You *know* your brushing problems are in good hands when you call in your **OBA.** This thorough service is yours for the asking. Call today or write *The Osborn Manufacturing Company, Dept. 748, 5401 Hamilton Avenue, Cleveland 14, Ohio.*

TRY MASTER® STRIP

This Osborn Brush is available in forms, shapes, sizes and fill material to match your job of cleaning, scrubbing or finishing . . . to boost your output and cut your costs . . . *at the push of a button.*

Osborn Brushes

OSBORN POWER, MAINTENANCE AND PAINT BRUSHES AND FOUNDRY MOLDING MACHINES

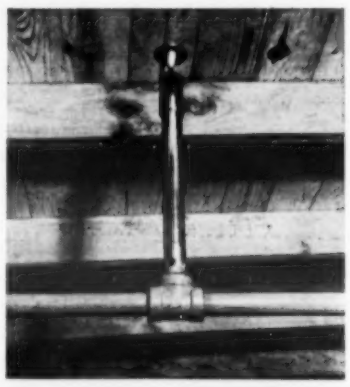
For more details circle **NED-5392** on enclosed inquiry slip

TRAY GLUING MACHINE produces 34-90 units per minute

Wide range of glued tray sizes can be produced by the Tray-Lock machine which produces a tray with glued taps that are inserted in slots. Blanks used to form trays have a straight slot which requires simple die work. Gluing the tabs to the sides results in a strong, firm tray. Machine is easily changed over for production of different sized trays. Trays are delivered right side up, ready for filling. Speed of machine is adjustable from 34 to 90 trays per minute. Made by **Package Machinery Co., E. Longmeadow P. O., Springfield, Mass.**

For more details circle **NED-5393** on enclosed inquiry slip

FOAM EXTINGUISHING SYSTEM puts out flammable liquid fires in industrial and processing plants



Suited for extinguishing three-dimensional fires in buildings where flammable liquids with flashpoints lower than 150° F are used, Air Foam fire extinguishing system makes use of foam discharge outlets located in accordance with Underwriters' requirements for automatic sprinklers. Application is also in building housing processing and pumping equipment. Water pressure at the outlets is maintained at 50 psi. High pressure breaks up the water into fine spray discharge. Standard rate-of-temperature-rise heat detectors spaced throughout the building automatically detect the fire, open the deluge valve in the water supply line and permit injection of a foam liquid stabilizer into the sprinkler system riser.

Air Foam is discharged at the rate of 2 gpm per square foot, equivalent to a floor depth of 3 ipm. Foam liquid stabilizer is adequate for 10-minute operation. Company reports that each installation requires an individual fire engineering study which gives consideration to chemical characteristics of the flammables, water requirements, drainage facilities, corrosive conditions, and other factors. Developed by **"Automatic" Sprinkler Corp. of America, P. O. Box 360, Youngstown 10, O.**

For more details circle **NED-5394** on enclosed inquiry slip

Saves you more time than any other tool in your kit

A Journeyman's tool, built to stand up under constant, on-the-job Contractor or Industrial use.

Built-in Blower—Anti-friction replaceable bearings—No starting hole needed—Blades to cut all materials—Fits any heavy duty ¼" or ⅝" drill.

Super Saws and Blades are listed on Federal Supply Schedules, Class 40 Material.

Write for literature and prices **(BULLETIN R6)**

R.C.S. TOOL SALES CORPORATION
JOLIET, ILLINOIS, U. S. A.

For more details circle **NED-5395** on enclosed inquiry slip

One of the famous "Line of Nine"

Indestructible Sheet Packing—Style 10. For sealing joints against steam, air, hot or cold water, ammonia, oils, gas, creosote and such substances.

This is one of the brands in the NYB&P "Line of Nine", the line which solves 90% of your normal packing problems. NYB&P also has a complete line to take care of the other 10%. Your local NYB&P Distributor is ready to help you select the proper packing for your specific needs. Ask him for free Packing Recommendation Chart.

NEW YORK BELTING & PACKING CO. Since 1846

NEW YORK BELTING & PACKING CO.
1 Market Street, Passaic, New Jersey

For more details circle **NED-5396** on enclosed inquiry slip

FOR YOUR PANEL DIALCO

A NOVEL and UNIQUE CIRCUIT INDICATOR

DESIGNED FOR NE-51 NEON LAMP
For 110 or 220 volt circuits
The required resistor is an integral part of this assembly —"built-in."
RUGGED DEPENDABLE LOW IN COST

UL

PATENTED: No. 2,421,321; Cat. No. 521308-997

WILL *YOU* TRY A SAMPLE?

Write on your company letterhead. We will act at once. *No charge, of course.*

SEND FOR THE 192 PAGE HANDBOOK OF PILOT LIGHTS

Among our *thousands of Pilot Light Assemblies* there is one which will fit *your special conditions.* Many are especially made and approved for *military* use. We pride ourselves on prompt deliveries—*any quantity.*

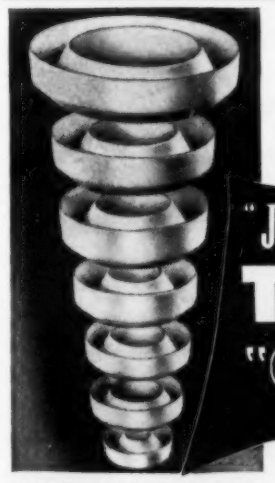
ASK FOR OUR APPLICATION ENGINEERING SERVICE

Foremost Manufacturer of Pilot Lights

The DIAL LIGHT COMPANY of AMERICA

900 BROADWAY, NEW YORK 3, N. Y. SPRING 7-1300

For more details circle **NED-5397** on enclosed inquiry slip



Most Effective Seal Against ANY Corrosive Liquid or Gas!

"JOHN CRANE" TEFLON "C-V" rings

"John Crane" offers a full line of standard size Teflon "C-V" Rings or can mold special sizes to fit your stuffing box requirements.

Send for catalog on "C-V" Rings and other Teflon products

This latest development in packing is chemically inert and withstands any corrosive liquid or gas as well as temperatures from −94°F. to 482°F. "John Crane" Teflon "C-V" Rings also have unusually low friction resistance—will not shrink, swell, harden, dissolve, corrode or deteriorate. Cross-section design allows effective sealing at low gland pressure. Ideal for use on all valve and reciprocating pumps as well as many centrifugal and rotary pump applications.

JOHN CRANE

CRANE PACKING COMPANY
1811 CUYLER AVENUE • DEPT. NE6 • CHICAGO 13, ILLINOIS

For more details circle **NED-5398** on enclosed inquiry slip

ELECTRIC BRAKE & CLUTCH CALCULATOR

● Here's a real tool for design engineers. This new Warner calculator conserves valuable time otherwise spent paging through catalogs and reference books. It provides all specifications necessary to select *electric brakes and clutches* in "jig time" . . . including sizes and dimensions . . . starting and stopping time . . . formulas and curves for torque and heat calculations, etc. Send for your free copy today. For help on starting and stopping problems, phone your nearby Warner Electric Brake and Clutch Engineer.

WARNER ELECTRIC BRAKE & CLUTCH CO.
BELOIT, WISCONSIN, U.S.A.

▲ For more details circle NED-5399 on enclosed inquiry slip ▲

Plant Operating Men find these MICRO "BAFI" Precision Switches ideal limits, safeties and interlocks where high current capacity is a "must"

● These MICRO "BAFI" precision switches combine long life and reliability with the capacity to make and break steady state currents of 20 amperes and to handle inrush currents as high as 75 amperes.

The rugged, die cast, aluminum enclosures protect the basic switching element against mechanical damage from vibration or shock and against the entrance of dust, dirt, oil or moisture.

The overtravel mechanism is built into the metal enclosure. This assures accurate repeatability of the operating point throughout the long switch life.

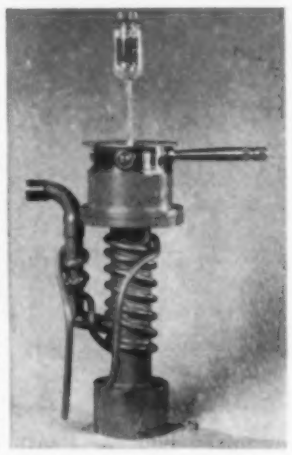
To provide plant engineers with the utmost versatility of mounting and actuation, these MICRO "BAFI" switches are provided with pin-plunger, roller-plunger, and roller-arm actuators and are available in either right or left hand designs.

For complete information on the characteristics and electrical ratings of these MICRO products, consult the MICRO SWITCH distributor in your community. These distributors are located in 127 cities to assist you in your plant switching problems. Look under "Switches, Electric" in your classified phone book.

MICRO MS SWITCH
FREEPORT, ILLINOIS
MICRO Snap-Action Switches . . Honeywell Mercury Switches
A Division of Minneapolis-Honeywell Regulator Company

▲ For more details circle NED-5400 on enclosed inquiry slip ▲

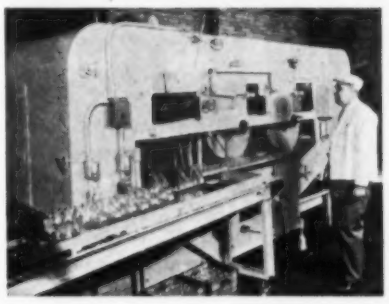
HIGH VACUUM PUMPING UNIT evacuates standard electron tubes



Model MB-10 pump, valve and port assembly has large capacity for use with conventional rotary exhaust machines used in electronic tube manufacturing. Unit can also be used to pump other relatively small volume containers, such as hermetically sealed relays, vials, instrument control elements and vacuum condensers. A modification permits small solenoid valves to be incorporated for evacuating larger volume vessels or when back-filling operations are required. Unit has fore-pressure tolerance of 400 microns and will operate through most standard sweep and sliding valve combinations. It operates at a pumping speed of 10 liters per second between 0.1 and 10.0 microns Hg and offers ultimate vacuum of 5×10^{-5} mm Hg. Made by **Distillation Products Industries,** 763 Ridge Rd. W., Rochester 3, N. Y.

▲ For more details circle NED-5401 on enclosed inquiry slip ▲

BOTTLE UNCASER-WASHER-LOADER incorportes automatic features for handling various case, bottle types



Up to 576 bottles per minute can be processed by the RCA full-depth bottle uncaser and washer-loader. Simple adjustments make it possible to assure a continuous flow of wood, metal and cardboard cases and bottles of various sizes and shapes to the washing equipment. The uncaser inverts the cases with bottles in place.

Inner, then outer rows of bottles are removed from case by rubber gripping surfaces and are conveyed to the washer-loader. Meanwhile cases are set right side up and delivered to a conveyor or to the right, left or rear of the machine. In the washer-loader machine, bottles are spread to the full width of the automatic washing equipment, then guided into as many channels as required by the washer. Machine automatically stops and rings a bell if faulty cases or improperly positioned bottles are fed in. Bottle supply control keeps an adequate supply of bottles ready to enter the washer. Made by **Radio Corp. of America,** RCA Victor Div., Front & Cooper Sts., Camden 2, N. J.

▲ For more details circle NED-5402 on enclosed inquiry slip ▲

IN MANY PRODUCTION PLANTS!

Continuous inspection unites with blind, straight-through and templet grinding by projection during the grinding period. This complete speedy machine handles a wider range of work than ever before. Difficult jobs in steel and tungsten carbide which required several machines are dispatched with ease and profit on Visual-Grind. Tolerances and accuracy are progressively controlled by visual reference. A precision optic system gives trueness and definition. Husky construction insures rigidity and long life.

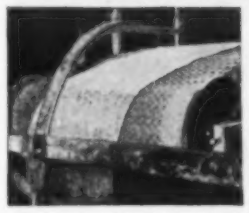
Ask for Bulletin N-6

VISUAL GRIND THE CLEVELAND GRINDING MACHINE CO.
1643 EDDY ROAD • CLEVELAND 12, OHIO

▲ For more details circle NED-5403 on enclosed inquiry slip ▲

want FREE ADVICE that'll save you money?

Your Cambridge Field Engineer can show you how woven wire conveyor belts combine movement with processing to reduce costs, boost output.



This typical Cambridge belt installation moves galvanized sheet from the pot through cooling and finishing.

Whatever the size or type of product you process . . . regardless of hot, cold or corrosive processing . . . the correct Cambridge Woven Wire Conveyor Belt installation to combine movement with processing means less manual handling, lower handling costs, faster, more uniform production.

Cambridge wire belts can be woven from any metal or alloy . . . including corrosion-resistant alloys . . . to any mesh or weave. If needed, we can provide special side or surface attachments to hold the parts during up or down movement. In processing involving liquids . . . quenching, painting, pickling, etc. . . . open mesh of the belt permits free drainage of process solutions. Where heat or gas atmospheres are used, open mesh permits free, uniform circulation of the process media.

It costs you nothing to get the experienced advice of your Cambridge representative. Why not call him in soon. See "Belting-Mechanical" in your classified telephone directory or write direct for the name of our man who serves your area.

130 Page Illustrated Catalog—FREE! Gives Cambridge belt design and conveyor construction, also complete belt specifications and metallurgical data. Write today.

The Cambridge Wire Cloth Co.

WIRE CLOTH | METAL CONVEYOR BELTS | SPECIAL METAL FABRICATIONS

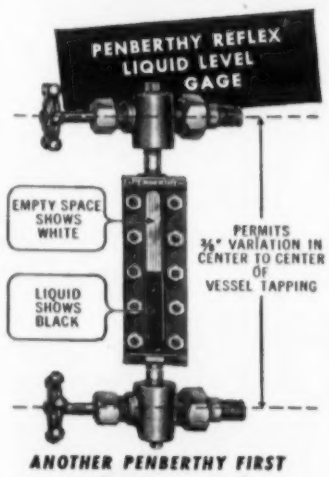
Department C
Cambridge 6, Md.

OFFICES IN PRINCIPAL INDUSTRIAL CITIES

▲ For more details circle NED-5404 on enclosed inquiry slip ▲

PENBERTHY "Floating Shank"

Saves Time and Money in Gage installation



ANOTHER PENBERTHY FIRST

A feature available only on Penberthy drop forged steel (and alloy) gage valves, the "floating shank" automatically compensates for as much as 3/8" variation in the center-to-center distance of the vessel tapping. This saves time and cuts the cost of gage installation . . . eliminates stresses often induced during mounting. Penberthy "floating shank" is available at slight additional cost. It will pay you well to specify "floating shank" on your next gage order.

PENBERTHY INJECTOR COMPANY
DIVISION OF THE BUFFALO-ECLIPSE CORPORATION
Established 1886 DETROIT 2, MICHIGAN Canadian Plant, Windsor, Ont.

▲ For more details circle NED-5405 on enclosed inquiry slip ▲

New MOTOR Catalog

GET THIS COMPLETE LISTING of electric motors for every purpose. Shows motor types, construction features, ratings, mechanical and electrical modifications available, NEMA definitions and much other useful data to help you.

To get your copy, call your nearby Allis-Chalmers District Office or send coupon today.

ALLIS-CHALMERS A-3525
PO Box 512
Milwaukee 1, Wisconsin
Please send me your Handy Guide to Motors (51B6052).
Name.....
Company.....
Address.....
City.....State.....

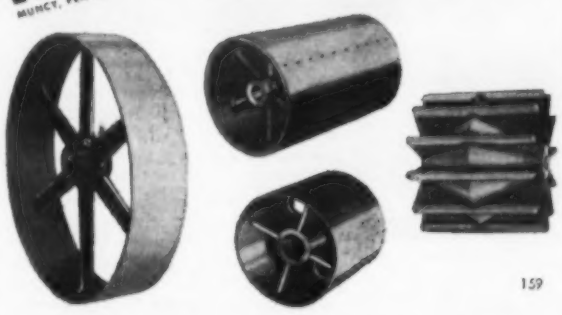
ALLIS-CHALMERS

▲ For more details circle NED-5406 on enclosed inquiry slip ▲

SPROUT WALDRON S W MUNCY, PENNSYLVANIA

PULLEYS

SOLID FACE and BELT SAVER



159

In handling rough, abrasive materials, S/W exclusive Belt Saver Pulleys are lengthening belt life as much as 400%. Equally well recognized is the S/W Blue Face Pulley Line in standard and made-to-order types and sizes. Write today for literature. Sprout-Waldron & Co., Inc., 8 Logan Street, Muncy, Penna.

Vertical Mixers, Attrition Mills, Rotary Feeders, Ribbon Type Mixers, Crushers, Knife Cutters, Continuous Mixers, Roller Mills, Separators, Pulleys

SPROUT-WALDRON

▲ For more details circle NED-5409 on enclosed inquiry slip ▲

NEW THREAD COMPOUND

Licks Stud Freezing Even at 1800° F.!

FREE TEST SAMPLE! Send for YOURS TODAY

SAFE for all high temperature applications!
SAFE for Stainless and Alloy Steels, too, will not pit or corrode!
IDEAL as a cutting compound to prevent galling of Stainless Steel!

Make a convincing test of Fel-Pro C-5 "Hi-Temp" Thread Compound at our expense. Then you can be sure that C-5 will do everything we say it will do. See how it cuts heater dismantling time—how it cuts costly stud breakage and eliminates pitting. Then you will standardize on C-5 just as have some of the nation's largest refineries, utilities and process industries. Write for FREE Sample and data sheet TODAY!

FEL-PRO C-5 "HI-TEMP" THREAD COMPOUND

5446 **FELT PRODUCTS MFG. CO.**
1510 CARROLL AVENUE • CHICAGO 7, ILLINOIS

▲ For more details circle NED-5410 on enclosed inquiry slip ▲

TOP CHOICE on LEADING EQUIPMENT

Look at the electronic and electrical equipment of leading manufacturers and more often than not you'll find it equipped with

SUPERIOR 5-WAY BINDING POSTS

It is such attention to important details that makes for manufacturing leadership. These binding posts give complete insulation, 30 ampere current capacity and 1000 volt working voltage. The captive ½" hexagonal head eliminates fumbling—makes a fast, complete, multi-purpose electrical connector.

FIVE CONNECTIONS

Whether your requirements call for the use of spade lugs, clip leads, ¾" banana plugs, straight wire looped and clamped around center shaft or permanent clamping of wire up to #12, the Superior 5-WAY Binding Post will serve your needs efficiently and economically. Available for immediate delivery in tough red or black phenolic plastic. Send for sample and literature today.

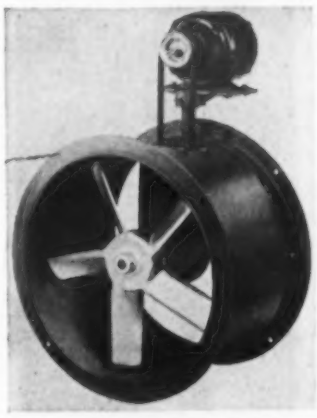
The Superior Electric Company, 906 Thure St., Bristol, Conn.
Please send sample 5-WAY Binding Post and literature to

Name_____
Company_____
Co. Address_____
City_____ Zone____ State____

THE SUPERIOR ELECTRIC CO. BRISTOL, CONNECTICUT SECO

▲ For more details circle NED-5411 on enclosed inquiry slip ▲

FUME EXHAUST FAN
motor is outside of flow path



Dangerous or obnoxious fumes, vapors, dirt, heat and smoke are handled safely and efficiently by this type SP exhaust fan. Because motor is mounted outside of air stream, it is unaffected by dirt or corrosive fumes. Explosionproof, enclosed or open type motor can be used, depending upon service conditions. Fan meets Underwriters Laboratories specifications for spray booths. Features include sealed SKF bearings of replaceable flange type, double angle motor support to minimize vibration, adjustable motor base for belt take-up and cast aluminum fans in sizes from 18 to 42 in. Motor sizes range from ¼ to 7½ hp, and capacities are up to 30,500 cfm free delivery. Made by **Standard Electric Mfg. Co.**, West Berlin 28, N. J.

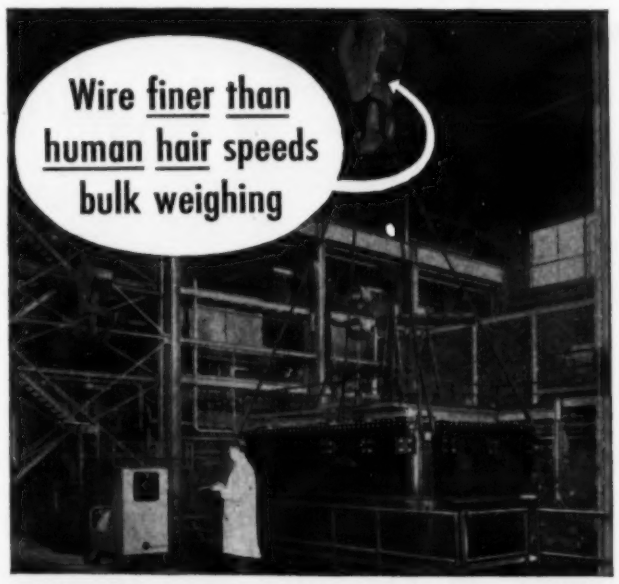
▲ For more details circle NED-5412 on enclosed inquiry slip ▲

MICRO-MICROAMMETER
measures extremely small currents with better than 5 per cent accuracy

Direct currents from 0.3 microampere to 0.3 micro-microampere full scale can be measured accurately within 5 per cent in all ranges with alternating current-operated model V micro-microammeter. This sensitive performance results from vibrating reed condenser used as capacity modulator. The reed, housed in hermetically sealed plug-in unit, has zero drift of less than 0.0005-v in 24-hour period. Reproducibility of 1 per cent is unaffected by ambient temperature or line voltage variations, and currents as low as 3×10^{-15} amp can be reliably detected.

Terminals on instrument chassis are provided for both current and voltage input, for regulated polarizing voltage, connection of 50-mv potentiometer recorder, connection of oscilloscope and for 120-cycle ac amplifier output. Gasketed, dustproof case encloses chassis for panel or relay-track mounting. Applications other than measuring or recording small currents include research with phototube and photomultipliers, radioactivity work with ion chambers, measuring ion currents from mass spectrometers, electronic surveillance studies, high insulation studies, capacitor leakage and polarization investigations. Made by **Beckman Instruments, Inc.**, Dept. 56, 800 Mission St., South Pasadena 5, Calif.

▲ For more details circle NED-5413 on enclosed inquiry slip ▲



Built into this 150 ton crane hook is a Baldwin SR-4 Load Cell that speeds and simplifies weighing of bulk materials. As loads vary, strains are transmitted to a compression member inside the Load Cell and in turn to a grid of very fine wire. As length of the wire is changed, resistance changes . . . and weights can be measured with an accuracy, speed and safety impossible with more conventional systems.

If you are interested in crane weighing, batch weighing, or any other type of weighing, you'll find Baldwin Load Cells offer a unique solution. Other SR-4 devices can solve your problems in measuring torque, pressure, explosions, etc.

BALDWIN-LIMA-HAMILTON
Testing Headquarters—Philadelphia 42, Pa.
In Canada: Peacock Bros. Ltd., Montreal, Quebec

▲ For more details circle NED-5414 on enclosed inquiry slip ▲

THE BEST IN DUAL ELEMENT FUSES

JEFFERSON Thermal SAF-T-LAG FUSES

Fuses have been an important Jefferson product for over 50 years. As one of a complete line of fuses, the SAF-T-LAG Dual-Element Thermal Fuse is the finest in design and affords the ultimate in circuit protection.

HERE'S HOW TO SELECT PROPER FUSE SIZES

For selection of correct Fuses for motors from 1/20 h.p. and up, refer to Folder 482-ST. Copy on request.

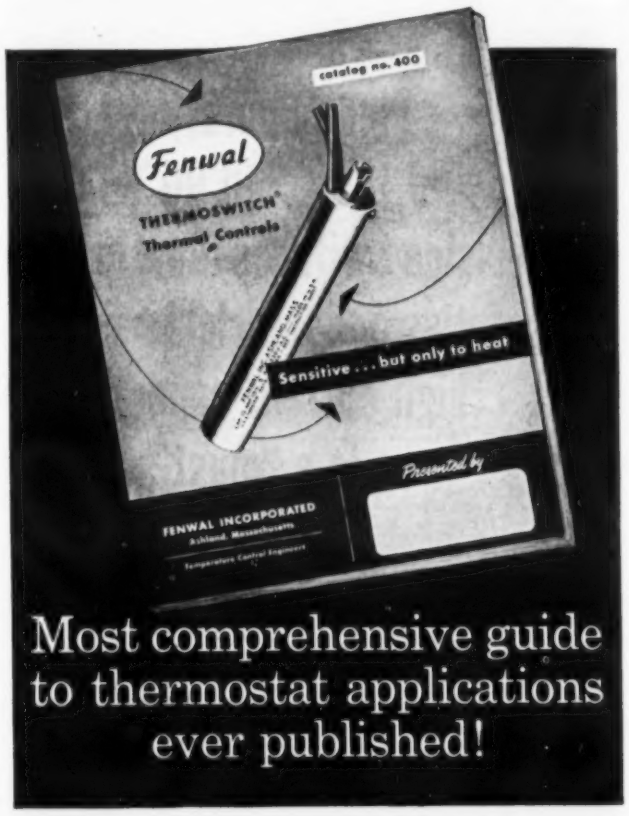
SAF-T-LAG FUSES

- Provide safe extra long time lag to avoid needless stoppages on heavy motor starting loads.
- Assure positive short circuit protection against costly damage to motors and connected equipment.
- The responsive thermal action guards against dangerous overheating of motors, panel boards, etc.

JEFFERSON ELECTRIC COMPANY
Bellwood, Illinois

★ *Ask your Wholesaler for Jefferson SAF-T-LAG Fuses*

▲ For more details circle NED-5415 on enclosed inquiry slip ▲



Most comprehensive guide to thermostat applications ever published!

Get your copy of unusual 52-page catalog today!

Find out *now* how you can get closer temperature control at lower cost. Illustrated, 52-page catalog shows you:

WHY Fenwal THERMOSWITCH® thermostats respond at the preset temperature you want (between —100°F and +1500°F) within the desired operating differential (can approach 0.1°F in a well-designed system).

HOW to choose the right THERMOSWITCH unit from the ten standard types for controlling temperatures of solids, liquids or gases.

WHERE to apply THERMOSWITCH controls in relation to heating elements in ovens, incubators, stills, dryers and other equipment.

WHEN special modifications may be added to standard THERMOSWITCH units to fit specific conditions.

HOW MUCH standard THERMOSWITCH thermostats and special modifications cost. You'll be surprised at the low list prices.

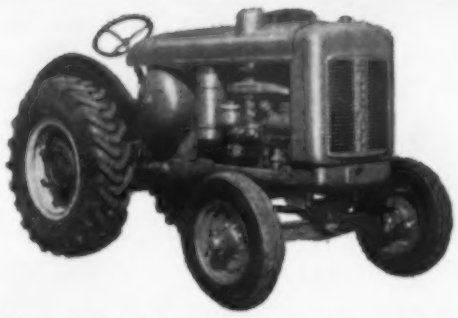
SEND FOR YOUR FREE COPY of this Fenwal catalog (No. 400) today. Fenwal, Incorporated, 86 Pleasant St., Ashland, Mass.

Fenwal

THERMOSWITCH®
Electric Temperature Control and Detection Devices
SENSITIVE... *but only to heat*

▲ For more details circle NED-5416 on enclosed inquiry slip ▲

Pneumatractor



The Schramm Model 105 Pneumatractor is a self-propelled tractor-compressor combination that fills many requirements, and will . . .

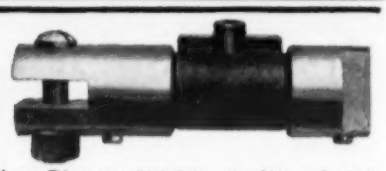
- **PUSH . . . .** Anything a Wheel Tractor will Push
- **PULL . . . .** Anything a Wheel Tractor will Pull
- **POWER . . .** Anything a Wheel Tractor will Power
- **PROVIDE AIR . . .** For Every Compressed Air Job

Write for Bulletin NEU-51

SCHRAMM INC. THE COMPRESSOR PEOPLE WEST CHESTER PENNSYLVANIA

▲ For more details circle **NED-5417** on enclosed inquiry slip ▲

QUALITY pneumatic vibrators



Piston Diameters ⅝", ¾", 1", 1⅛" and 1½". (⅝" and ¾" sizes have single-shoulder heads)

2" Piston Diameter.

to keep production on the MOVE

To Tabor, quality means using good metals and practical design to build pneumatic vibrators that operate the instant you need them, stay "on the line," live a long, carefree life. They are easily attached to all types of equipment—bins, chutes, hoppers, screens, etc. They're in the full range of services—from delivering powerful jolts to free frozen coal from hopper cars, to milder vibrations in a fertilizer plant, to gentle nudging of moving bottles in pharmaceutical houses. They add years to equipment life and save countless man-hours of hammering, prodding and poking. A letter today can break a production bottleneck!

THE TABOR MANUFACTURING CO.
6227 TACONY STREET, PHILADELPHIA 35, PA.

▲ For more details circle **NED-5418** on enclosed inquiry slip ▲

For Unusual Applications, too—
UNIVERSAL METAL HOSE
—adds flexibility, portability and durability!

For example—the Electric-Aire dryers use "UMH" aluminum flexible tubing for easy directional adjustment and application of preheated air in drying plastic casts in fracture cases and in shock treatment.

Perhaps you have a specific problem in conveyance of gases, liquids, semi-solids, dust, granular materials—give us the particulars and we will be glad to make recommendations no obligation, of course.

Write for Catalog U-101

UNIVERSAL METAL HOSE CO.
2155 SOUTH KEDZIE AVE. • CHICAGO 23, ILLINOIS

▲ For more details circle **NED-5419** on enclosed inquiry slip ▲

SENSITIZED-PAPER DISPENSER
flick of handle ejects single sheet

Photorecording operations are speeded up with the Portagraph sensitized paper dispenser which has spring controlled ejection bar for delivering single sheet everytime handle is flicked. Device is absolutely light-tight and has cloth-protected ejection slot. It is available in two sizes, the G23 for 8½ x 11-in. paper, and the G24 for 8½ x 14-in. sheets. Dispensers weigh 4⅝ lb and 5¼ lb, respectively. Made by **Remington Rand Inc.**, Dept. NED, 315 Fourth Ave., New York 10, N. Y.

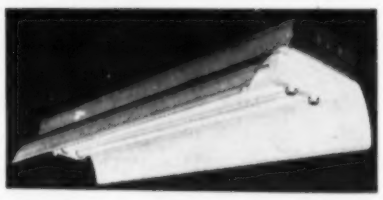
▲ For more details circle **NED-5420** on enclosed inquiry slip ▲

PYROMETER
unit will fit in pocket

Weighing only 10 oz, model 237-T pocket-size pyrometer registers 400 to 2250° F or to 1250° C. It is calibrated for a 1/16-in. steel panel. A knife-edge pointer indicates temperatures on the "easy-read" dial. Spot temperatures can be obtained instantly, even by inexperienced personnel. Pyrometer is priced at $20. Made by **L & L Mfg. Co.**, 136 Eighth St., Upland, Pa.

▲ For more details circle **NED-5421** on enclosed inquiry slip ▲

INDUSTRIAL LIGHT FIXTURE
features rust resistant construction

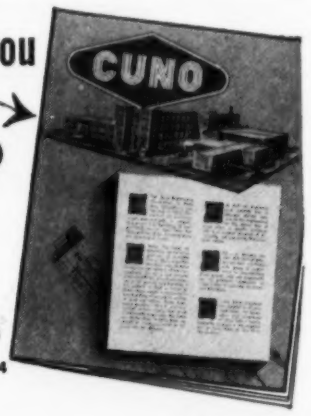


Finished to provide maximum resistance to oxidation in installations where extreme humidity and adverse atmospheric conditions prevail, line of industrial fluorescent lighting fixtures includes 4, 5 and 8-ft conventional types for bi-pin lamps and 4, 6 and 8-ft mono-pin two and three-light slimline types. They produce uniform illuminations to all surfaces within the arc of the reflector and have good shielding. All parts are treated against oxidation, are assembled with cadmium plated screws and are finished individually with two coats of hot bonded hi-baked enamels. End panels can be detached and couplers added to make completely closed channel of any length. Components are ETL approved and fixtures meet RLM requirements. Made by **Gibson Mfg. Co.**, 1911 Piedmont Circle, Atlanta, Ga.

▲ For more details circle **NED-5422** on enclosed inquiry slip ▲

Free Folder tells you

WHICH FLUID STRAINER



- handles full flow [1]
- of many industrial fluids [2]
- removing 100% of solids [3]
- without stops for cleaning [4]
- and lasts indefinitely [5]

Cuno Auto-Klean — in same space as usual partial-flow type — (1) handles *full flow* of (2) lubricating, hydraulic and fuel oils, water and process fluids. It (3) is *guaranteed* to remove all solids larger than specified. It is (4) *continuously cleanable* without stopping flow, and (5) is all metal, non-collapsible, and corrosion resistant.

For free booklet on fluid straining, address Cuno Engineering Corp., Dept. 707A, South Vine Street, Meriden, Connecticut.

*Models available for straining from .0035 to .062 in.

CUNO *Fluid Conditioning*
Removes More Sizes of Solids from More Types of Fluids

▲ For more details circle **NED-5423** on enclosed inquiry slip ▲

NO MORE CARBON SCRAPING

*DUNK AND DRIER BASKET INCLUDED

U. S. PAT. #2318842*

GUNK DUNK BENCH Carburetor and Parts Cleaning Kit. New 6½ gal. size deep "Vapor-catcher" design pail.

Nothing Decarbonizes and Cleans CARBURETORS, FUEL PUMPS, PARTS *Like..*

New—Improved More Potent*
GUNK HYDRO-SEAL

A WORD OF CAUTION
If it doesn't bear the Genuine GUNK trademark, it may be a partly diluted imitation—and will not give you the Safety and Advantages of Genuine GUNK and should be flatly refused.

*1. Faster . . . Terrific penetration . . . new improved odor.
2. Quickly digests and removes carbon gum, paint, lead, makes possible accurate visual inspection and fitting of delicate metering mechanisms, jets, orifices and diesel nozzles . . . without etching.
3. Lasts more than one year . . . due to water blanket.
4. Works hot or cold . . . Rinses wet or dry.
5. Patented Double Barrel Performance Guaranteed.

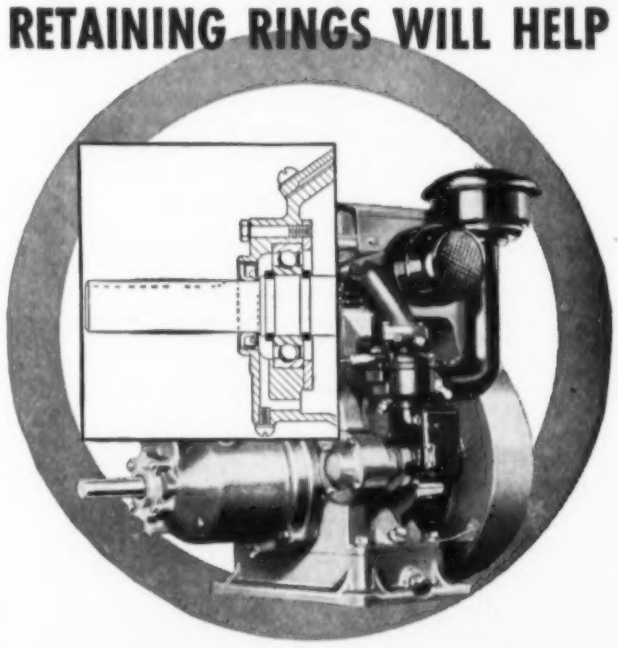
SOLD BY BETTER JOBBERS EVERYWHERE—Write for Name of Nearest Stocking Jobber—Flatly Refuse Substitute Imitations—

IMMEDIATE DELIVERY 1 GALLON OR A TANK CAR

CURRAN CORP. Mfg. Chemists LAWRENCE, MASS

▲ For more details circle **NED-5424** on enclosed inquiry slip ▲

SAVE WHEREVER YOU CAN!
RETAINING RINGS WILL HELP



These inexpensive, efficient artificial shoulders save metal and money on Wisconsin air cooled heavy duty engines.

And in addition to saving money and metal, retaining rings save many costly hours in assembly time. Instead of the former wasteful practice of cutting down large shafts, you can redesign to groove smaller shafts and use these high grade steel rings. In your housings, too, rings will save money and improve your products, your machines and your profits.

Every product—metal, wooden or plastic—and every machine should be examined now to see where shoulders and collars can be redesigned to effect great savings by the use of steel retaining rings.

Let us show you how they can do an efficient job for you on your shafts or in your housings.

Write today for booklets on many types of National Retaining Rings.

THE NATIONAL LOCK WASHER CO.
NEWARK 5, NEW JERSEY • MILWAUKEE 2, WISCONSIN

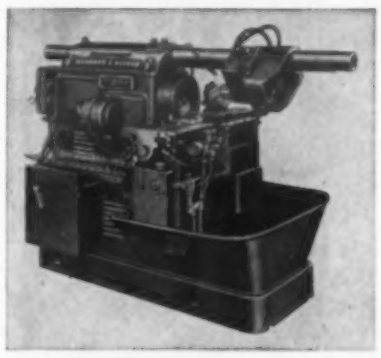
▲ For more details circle **NED-5425** on enclosed inquiry slip ▲

Steel mills, drop forge plants, foundries and other plants with hot working conditions find this Coppus Heat Killer increases worker efficiency . . . at reasonable cost. *A single fan cools large areas.*

Other types also available for cooling furnaces, electrical equipment, for driving out gases, drying out products, drawing out fumes. Write now for detailed information. COPPUS ENGINEERING CORPORATION, 406 PARK AVENUE, WORCESTER 2, MASSACHUSETTS.

▲ For more details circle NED-5426 on enclosed inquiry slip ▲

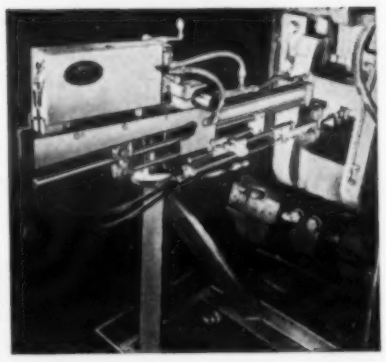
PIPE CUTOFF MACHINES
speeds range from 85 to 1100 rpm



Electric remote control permits automatic cutoff to any length on models No. 33 and No. 34 pipe cutoff lathes. No. 33 has capacity to 3-in. OD by 2½-in. ID pipe while model No. 34 can cut off pipe with 4-in. OD and 3½-in. ID. Spindle speeds range from 85 to 1100 rpm with four quick changes. Pair of reversible pickoff gears makes available total of eight speed changes. Independent hydraulic systems are used for cutoff slides and collet chuck operations. Complete change in setup from one size and length of work to another can be made in less than half hour. Pieces are cutoff with roller cutter and chamfered at both ends on outside diameter ready for threading. An automatically operated stock feed table is also available with the cutoff lathe. Made by **Bardons & Oliver, Inc.,** 1143 W. Ninth St., Cleveland 13, O.

▲ For more details circle NED-5428 on enclosed inquiry slip ▲

PRESS UNLOADER
portable unit handles stampings rapidly and is air actuated



Mounted on heavy steel frame which rides on four caster-like wheels, this portable unloader can be wheeled up to any small or medium size press for automatic removal of small stampings. Machine consists of jaw, air cylinder and electric control assembly. It can be adjusted up or down to accommodate various die levels, and can be set at any angle. Jaw travel is in straight line.

Machine is synchronized with operation of press. When the ram descends to complete forming or shearing operation, steel jaw moves into die and takes a firm hold on stamping the moment the ram rises. Jaw lifts stamping, moves back out of die area and drops the stamping into tote box or onto conveyor. Jaw then returns to its original position, ready for next cycle.

Gripping jaw designs are available for variety of special unloading conditions. They include hook type, Neoprene-tipped grip, pivot unit and confined type. Made by **Sahlin Engineering Co.,** 267 Ferndale St., Birmingham, Mich.

▲ For more details circle NED-5429 on enclosed inquiry slip ▲

THE FAMOUS MULTIFORM BENDER CUTTER

Produces Without Special Tooling — Saves Die Costs Saves on Expensive Presses

The illustration at the left shows just a few pieces produced on our famous Multiform Bender-Cutter. This efficient machine is useful in all lines of trade

NO. 5 AIR MODEL

ALSO BUILT IN LARGER SIZES

HAND OPERATED MODELS AVAILABLE

FIVE-IN-ONE-TOOL
IT BENDS FLAT AND ROUND STOCK INTO ANY SHAPE. CUTS AND PUNCHES FLAT STOCK

J. A. RICHARDS CO. MYRTLE & PITCHER STS. KALAMAZOO, MICHIGAN

▲ For more details circle NED-5431 on enclosed inquiry slip ▲

THE SCRAP SHORTAGE

Makes a "CANTON" Alligator Shear an even more important piece of equipment for EVERY METAL WORKING PLANT!

• This low priced "Canton" Model 11-A Shear has an adjustable knife seat, 24" knives, is bronze bushed throughout and will cut 2" squares in mild steel or 3/8" x 24" in plates. "Canton" Shears are made in a complete range of sizes for processing all types of scrap.

Send for Bulletin 52-N

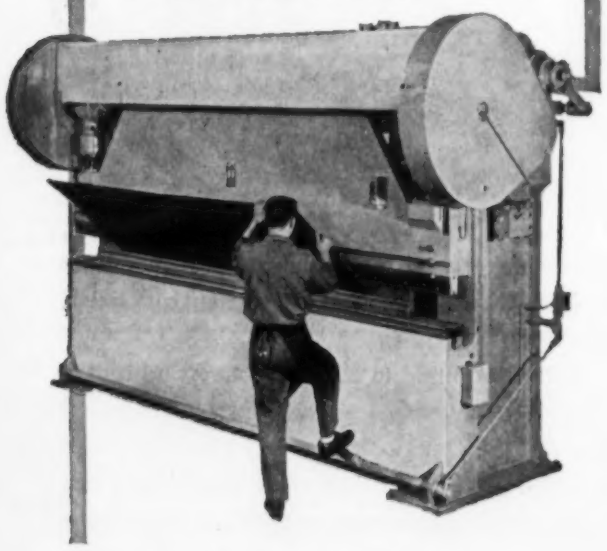
The HILL ACME CO.
"CANTON" DIVISION 1209 W. 65TH ST., CLEVELAND 2, OHIO

▲ For more details circle NED-5432 on enclosed inquiry slip ▲

How many Features can a Press Brake have!..

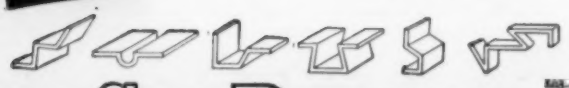
CHECK THESE BATH FEATURES

- Built-in overload release mechanism
- One-piece welded steel frame
- Removable adjustable dovetail slotted bed top
- Double-end drive from both housings
- Reversible unit flywheel assembly
- Twin Disc double-plate type clutch and brake
- Clear working space front and rear
- Tonnage indicators at each end of bed
- Up to 40% less power required



These are but a few of the 21 outstanding features you get in every BATH power press brake ...the features that assure continuous trouble-free production. Superior construction of BATH presses results in long service life, maximum safety for both operator and machine, minimum maintenance and quick installation. Patented release mechanism, which immediately disengages flywheel when excessive load is imposed, is one reason why BATH presses are noted as safe, dependable production tools.

Write today for illustrated 28-page Catalogue No. S-1002 for complete information.



THE CYRIL BATH COMPANY
6983 Machinery Avenue • Cleveland 3, Ohio

▲ For more details circle NED-5427 on enclosed inquiry slip ▲

Twisted Wire Brushes IN 54 STANDARD SIZES

• Now, for the first time, you can order Mill-Rose precision made twisted wire brushes in 54 standard sizes... both single and double spiral for hand or power operation. Size range is from 3/16 inch to 1" diameter and 1½" to 3" brush length.

Mill-Rose also manufactures a wide line of special twisted wire brushes for many diversified uses in industry... all made to close specifications of carefully selected types of wire.

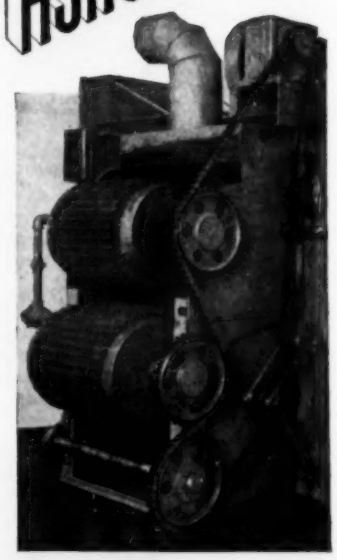
If you need twisted wire brushes for any purpose write today for the Mill-Rose Standard Brush Bulletin... If special brushes are needed, send specifications for a quotation.

THE MILL-ROSE COMPANY
1985 EAST 59TH STREET • CLEVELAND 3, OHIO

HIGH PRECISION MILL-ROSE INDUSTRIAL BRUSHES

▲ For more details circle NED-5430 on enclosed inquiry slip ▲

Metal Belts for Processing and Handling all Materials . . . engineered for the specific end use by ASHWORTH



For applications ranging from subzero to 2100°F.

•

Our Engineering and Testing standards are your assurance of "The Right Belt" for the job.

•

WRITE FOR ILLUSTRATED CATALOG 52D

ASHWORTH BROS., INC.
METAL PRODUCTS DIV. • WORCESTER, MASS.

Sales Engineers located in Buffalo • Chattanooga • Chicago • Cleveland • Detroit Los Angeles • New York • Philadelphia • Pittsburgh • Seattle Canadian Rep., PECKOVER'S LTD. . Toronto . Montreal

▲ For more details circle NED-5433 on enclosed inquiry slip ▲

NEW *Silic-O-Netic* TIME DELAY RELAY...*only one moving part*

SEND FOR BULLETIN 5001A.

It is complete and informative.

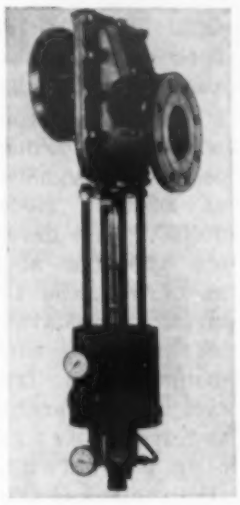
The simplest time element ever developed is the basis of the new low cost *Silic-O-Netic* Time Delay Relay. There are no heating elements . . . no gaskets . . . no levers . . . no mechanical connection to the armature, yet the time element forms the very heart of the relay itself.

Being hermetically sealed, the *Silic-O-Netic* element is forever free from the effects of dirt and dust. Employing silicones, timing is positive and unaffected by normal temperature changes.

HEINEMANN ELECTRIC CO.
106 Plum Street, Trenton 2, N. J.

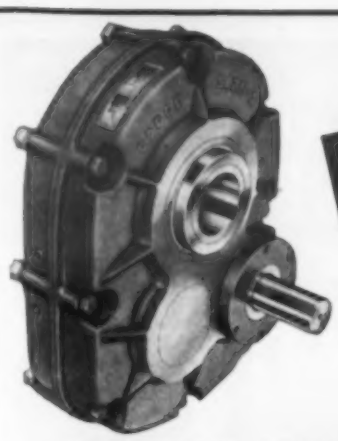
▲ For more details circle **NED-5434** on enclosed inquiry slip ▲

SLURRY CONTROL VALVE will not plug at low flow rates



Designed for proportioning and controlling pulp and paper stock and similar slurries, the Ratogate control valve can be used for any low pressure automatic service. Valve assures range of operation of 13 to 1 or better, throttles automatically and remains free from plugging even at flow rates as low as 30 gpm. Diamond-shaped outlet of discharge port and sliding gate provides minimum wetted perimeter and maximum opening area so stock cannot accumulate to block passage. Valve is self-cleaning, and sight glass window allows inspection of discharge port and gate. Units are equipped with pneumatic cylinder operators and positioners externally mounted. In smaller valves, positioner is integral with operator. Tapped openings at inlet facilitate flushing with water purge line. Standard construction is of 304 stainless steel, but other materials are available. Made by **Fischer & Porter Co.**, 42 County Line Rd., Hatboro, Pa.

▲ For more details circle **NED-5436** on enclosed inquiry slip ▲



A NEW SIZE! **43 H.P.**

DODGE TORQUE-ARM *Speed Reducer*

Here is the new "big brother" of the famous Dodge Torque-Arm family. Double reduction—43 hp capacity—output speeds from 12 to 110 rpm. Rugged, dependable, economical. No special engineering required, no expensive installation. Driven through any V-belt drive—stock Taper-Lock sheaves prescribed for desired speeds. Backstop available if desired. Write for special Torque-Arm bulletin and information about new Dodge Tri-Matic Overload Release.

DODGE MANUFACTURING CORPORATION, 2100 Union St., Mishawaka, Ind.

DODGE
of Mishawaka, Ind.

▲ For more details circle **NED-5439** on enclosed inquiry slip ▲

HERE'S HOW IT WORKS:

POSITIVE —AUTOMATIC

YOU DON'T HAVE TO KICK THE BUCKET TO CLEAR IT— IF IT'S A PEKAY M-T-MATIC

SELF-CLEANING ELEVATOR BUCKET

Kicking, banging and battering ages buckets fast; and frequent replacements are expensive—so is downtime. Yet, carrying a dead plug round and round your elevator conveyor, jammed or frozen immovably into the bottom of your ordinary bucket, is no way to make production profitable!

With the patented PEKAY *M-T-MATIC*, each bucket *must* empty itself on every trip, *even if* SAND, GRAVEL, COAL, or other granular materials *are frozen or close packed.* The separately mounted stripper-plate—*an exclusive M-T-MATIC feature*—applies irresistible leverage to bucket contents, pushing up and out as it starts over head pulley.

Save with *M-T-MATICS*—handle *more* material at same or faster belt speeds . . . cut belt replacement costs because there is much less strain on belts . . . reduce downtime and maintenance. THOUSANDS OF M-T-MATICS ALREADY IN USE are making money for users throughout the country. Available in all sizes—easy to install on any elevator conveyor. Order a couple at once and see for yourself!

QUICK DELIVERY!

★ **Send for prices today—**
(give present bucket size)

Standard Buckets also available.

PEKAY MACHINE & ENGINEERING CO.
100 N. LA SALLE STREET CHICAGO 2, ILLINOIS

▲ For more details circle **NED-5435** on enclosed inquiry slip ▲

COUNTING-WEIGHING MACHINE for various shaped small parts is hand or foot switch operated

Packaging is speeded and counting errors eliminated by Weight-O-Pack machine which counts and packages variety of small parts by weight. Washers, pins, nuts, or other small parts are placed in a 3 cu ft hopper which has a vibrating unit for moving them into the packages which are placed on a balance type scale which controls flow of material. When required amount, less two or three pieces, is in package, the scale de-energizes the vibrating unit and parts flow stops.

The operator completes the count and slides the package to a table of same height as scale. A conveyor can be incorporated. A hand or foot switch starts the filling again. Emergency stop button is provided. Maximum package weight is 10 lb, with heavier packages treated on special order. Made by **Inter-Lakes Engineering Co.**, 4847 Bellevue, Detroit 7, Mich.

▲ For more details circle **NED-5437** on enclosed inquiry slip ▲

FREE TRIAL SHOWS HOW!

SHAKEPROOF T. M. REG. U. S. PAT. OFF.
"SPEED-NUTS*"
SAVE TIME . . . REDUCE COSTS!

Designed to clip quickly and easily in place, SHAKEPROOF "SPEED NUTS" eliminate costly riveting, staking or welding operations. Light weight and easy handling speeds assembly.

SEND FOR FREE TEST KIT NOW!

*T. M. REG. U. S. PAT. OFF. BY TINNERMAN PRODUCTS, INC.

SHAKEPROOF inc.
"Fastening Headquarters" TRADE MARK
A DIVISION OF ILLINOIS TOOL WORKS
2501 North Keeler Avenue, Chicago 39, Illinois

▲ For more details circle **NED-5440** on enclosed inquiry slip ▲

Specify **HOUGHTON**
THE RUST PREVENTIVES WITH

"POLARIZED ADHERENCE"
TO METALS—INDOORS OR OUT!

A special process produces "polarized adherence"—a sort of magnetic attraction—that makes the new type of Houghton rust preventives cling to metals until cleaned off.

That's why, when properly selected, they give you positive protection—for either short or long term exposures, indoors or out.

There's a "Cosmoline" or "Rust-Veto" for every purpose. Get bulletin from E. F. Houghton & Co., Philadelphia 33, Pa.

COSMOLINE widely used to meet GOVERNMENT "SPECS."

RUST-VETO popular for general INDUSTRIAL USES.

RUST-VETO and COSMOLINE . . . products of

E. F. HOUGHTON & CO.
PHILADELPHIA · CHICAGO · DETROIT · SAN FRANCISCO

Ready to give you on-the-job service . . .

▲ For more details circle **NED-5438** on enclosed inquiry slip ▲

SOMETHING NEW IN PRODUCTION ECONOMY
CHALLENGE PRESENTS THE LOW-COST UTILITY BENCH

Simplicity of design keynotes this new Utility Bench by Challenge. No "frills" or fancy accessories to add to the price . . . just a heavily-ribbed 24" x 36" cast-iron top supported by four sturdily braced, steel legs. Lightweight, yet rugged in construction. Ideal for many uses in any shop. 36" high . . . or (30" high as a nailing table.) Write today for details.

A Challenge Work Bench for Every Requirement—In 4 sizes: 28" wide by 4, 5, 6, or 7 ft. long. Each with cast-iron top . . . steel tool box shelf . . . drawer with lock . . . convenient storage shelf, plus other extras to speed production. 705

THE CHALLENGE MACHINERY CO.
Office, Factories, Show Room — Challenge — *Grand Haven, Michigan*
TRADE-MARK ®

▲ For more details circle **NED-5441** on enclosed inquiry slip ▲

WE'LL SEND YOU THIS WHOLESALE CATALOG FREE!

Save Money

OVER 9,000 ITEMS INCLUDING

THE HARRY ALTER CO.
1726 S. MICHIGAN AVE., CHICAGO 16
132 LAFAYETTE ST., NEW YORK 13

For more details circle NED-5444 on enclosed inquiry slip

LIKE AN ATOM-IC EXPLOSION

Just 1/32" (pinhole size) faucet leak
MUSHROOMS into ATOMIC WASTE
of approximately 95,000 gallons of water yearly—costing:
$24.14
@ $1.90 per M cubic feet

If a hot water faucet, then actual FUEL WASTED heating 95,000 gallons costs approximately:
$88.91 if coal (9679 lbs.)
$91.08 if oil (792 gals.)
$84.41 if gas (84,411 cu. ft.)

Above figures authenticated by Hackensack Water Co. and American Gas Association.

STOP this needless WASTE during today's MATERIAL and MANPOWER shortages with 'SEXAUER' "Easy-Tites" that outwear ordinary faucet washers 6-to-1, thus SAVING labor on 5 REPEAT repairs, PLUS water and fuel, while prolonging the life of SCARCE fixtures.

PAT'D.
"EASY-TITE" Faucet washers

...a modern laboratory triumph, are compounded from du PONT NEOPRENE (tested up to 300°F.) instead of rubber—to withstand DESTRUCTIVE HEAT common in present-day superheating water systems—that formerly broke down washer's structure.

Built like a tire with fabric re-inforcement

they resist the grinding, closing squeeze that SPLIT and MUSH ordinary washers out of shape...causing LEAKS.

Through combining NEOPRENE and FABRIC RE-INFORCEMENT they OUTWEAR ordinary washers 6-to-1 on hot or cold FAUCETS—thus you slash water, fuel and labor costs.

THE NEW 'SEXAUER' CATALOG,
Edition G, just out pictures over 2500 TRIPLE-WEAR plumbing REPAIR parts and Pat'd. Precision Tools. It's today's accepted buying guide for discriminating purchasing and maintenance personnel among thousands of top PLANTS, INSTITUTIONS and GOVERNMENT AGENCIES that rely on SEXAUER repair materials. Send for your copy today!

Then too, there's a SEXAUER TECHNICIAN within quick call from coast-to-coast, who offers a special SURVEY service that sets up a schedule of the exact replacement parts required for your particular plumbing fixture regardless of make or age and without obligation.

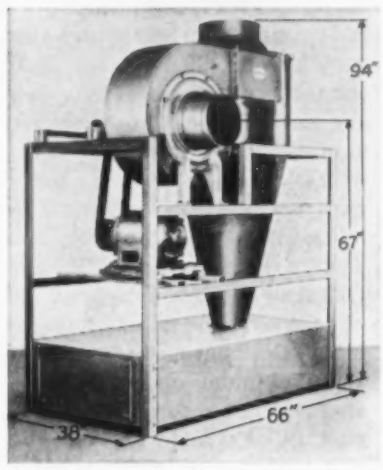
A postcard will bring him and your NEW Catalog promptly.
J. A. SEXAUER MFG. CO., INC., Dept. AU 62,
2503-05 Third Avenue, New York 51.

as advertised in THE SATURDAY EVENING POST

SEXAUER
WORLD'S LEADING SPECIALISTS IN PLUMBING AND HEATING REPAIR PARTS

For more details circle NED-5445 on enclosed inquiry slip

DUST COLLECTOR
controls metal or woodworking dusts



Only 38 x 66 in. floor space is required for installation of self-contained unit type dust collector designated as Dustkop model 50N60. Unit develops 5,500 cfm at 4 in. of water on 12-in. inlet and is available complete with motor driven fan, cyclone separator and dust storage compartment. Height to top of sleeve is 94 in. Both inlet and outlet sleeves, 12 and 16 in. respectively, are sized to fit standard sheet metal pipe. Collector efficiently controls dusts and chips generated in metal grinding, polishing, buffing, turning, milling operations; in woodworking or chemical and foodstuff handling. It is equipped with 10-hp continuous duty motor which drives self-clearing paddle wheel fan through series of v-belts. Starter switch is mounted on frame. Unit is made of spot welded heavy gage steel framed in angle iron and finished with corrosion resistant paint. Made by **Aget-Detroit Co.**, 201 Main St., Ann Arbor, Mich.

For more details circle NED-5446 on enclosed inquiry slip

ADJUSTABLE LIGHT FIXTURES
will stay set at any angle

Both direct and indirect lighting can be provided by line of Vogue-Lite adjustable lighting fixtures now being made in six colors to blend with modern interiors. Equipment features spring tension socket which adjusts at any angle. The two latest variations are the Wallite Swivel and the Swivomatic Joint, illustrated, models. Wall mounted units are available with the Shur-Mount attachment which will not chip or crack plaster. Cosmopolitan shade accommodates up to 100-w regular or 75-w R30 lamps. Line includes 26 models including units for 3¼ or 4-in. outlet box attachment as well as for wall-mounting, portables, clamp-ons, screw-ins, clusters, extension pipe and outdoor units. Oven-baked colors include rose, green, yellow, gray and silver or brass glow finishes. Made by **Swivelier Co.**, Dept. P, 30 Irving Pl., New York 3, N. Y.

For more details circle NED-5447 on enclosed inquiry slip

SCRAPE OR SCRUB

WITH THIS ONE HILD MACHINE

Scrape off hard-caked grease and dirt... scrub away dangerously slippery oil with this one powerful HILD Floor Machine. With Power-Scraper attachment the HILD Machine saves hours of chipping with a hand-spud. No danger of marring floor surface or of loosening wood blocks. With Shower-feed Brush, the HILD Machine is equally speedy and thorough in scrubbing away slippery oil film... easily reaches "danger spots" around, beneath and between machines.

Only HILD has the SHOWER-FEED BRUSH

Cleaning solution flows from tank on handle through holes in brush back between each row of bristles ...for thorough scrubbing with utmost economy.

Ask for FREE Demonstration

Write for FREE 24-Pg. Book

1927-1952 HILD System MAINTENANCE EQUIPMENT & SUPPLIES OUR 25TH YEAR

HILD FLOOR MACHINE COMPANY
Dept. NE6, 740 W. Washington Blvd., Chicago 6, Ill.

For more details circle NED-5448 on enclosed inquiry slip

Dollar and Cents Angle
on Fafnir Sealed Ball Bearings

Figure it out yourself . . . you may be able to cut manufacturing costs by using one of the several types of Fafnir Sealed Ball Bearings.

These bearings simplify assemblies, cut out machinery operations and eliminate extra parts otherwise needed to provide and retain lubricants.

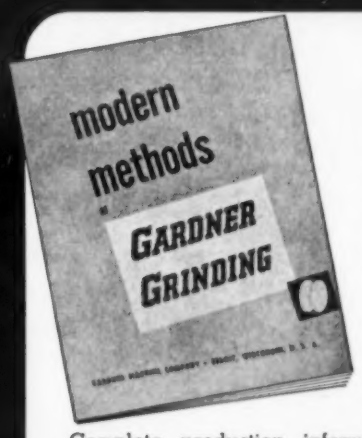
Find out . . . call in a Fafnir representative. The Fafnir Bearing Company, New Britain, Conn.

FAFNIR BALL BEARINGS

MOST COMPLETE LINE IN AMERICA

For more details circle NED-5449 on enclosed inquiry slip

You'll Want This New Book!



FREE!
32-page book with 25 examples of how flat surface grinding problems were solved

Complete production information given on flat surface grinding work pieces such as springs, cement blocks, bathtubs, brake linings, and many others. Tells how to grind one surface, or two parallel sides in one operation . . . an idea book for flat surfacing steel, brass, cast iron, plastics, porcelain, cement blocks. Send for your copy today!

GARDNER MACHINE COMPANY
460 Gardner Street • Beloit, Wis.

For more details circle NED-5450 on enclosed inquiry slip

UNIVERSAL BOARDMASTER

—today's finest drafting machine—simplifies the mechanics of drawing and leaves the professional mind free for constructive thinking. With one-hand, turret-type control, it combines into a single unit all the loose tools of the draftsman's art — de-clutters the board — produces finer work with less effort at lower cost. For proof of quality—read about Boardmaster's unquestioned mechanical superiority in our bulletins—sent free on request. Write Universal Drafting Machines Corp., 7960 Lorain Ave., Cleveland 2, Ohio, or your local dealer.

UNIVERSAL
DRAFTING MACHINE — DURALINE SCALES

For more details circle NED-5451 on enclosed inquiry slip

SIMPLICITY!

Low Upkeep Cost
Trouble-Free

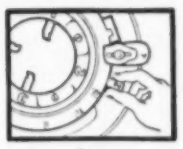
BEAVER NO. 26-R
1 TO 2-INCH PIPE THREADER

Right or left hand models

5 OUTSTANDING ADVANTAGES

Radio Dial Setting Change in 2 Seconds

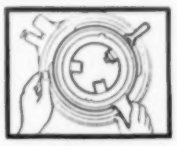
• The new Beaver 26-R is a greatly improved and simplified successor to the "old Beaver 26," popular for 40 years. Drive ring is on top—in line with dies for easy cutting. Oversize, undersize or standard threads can be cut of uniform length. Has "radio dial" setting. Change size in 2 seconds without tools. Standard taper or electric conduit threads. One set dies. No bushings.



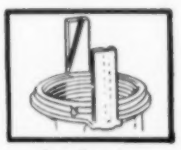
Dies Easily Removed from Outside

BEAVER PIPE TOOLS, INC.
266-300 DANA AVE. • WARREN, OHIO, U.S.A.
"Over 50 Years of Friendly Service"

Straight Line Pull Easier Cutting



Universal Chuck · Accurate Centering · No Bushings



Cuts Taper or Straight Threads

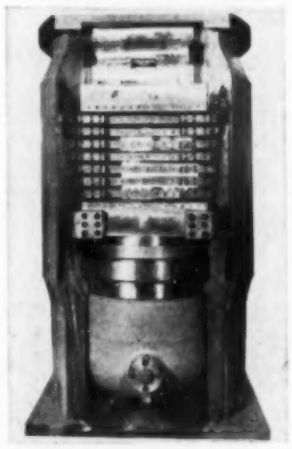
For more details circle NED-5452 on enclosed inquiry slip

COMPOSITION TIE PADS reduce railroad track maintenance

Tie pads made of abaca fiber compounded under great pressure with Vinylite resins absorb the shock and destructive abrasion caused by heavy engines and cars moving over the rails. Placed between the steel tie plates and wooden ties, the pads have shown that tie installations can be reduced 30 to 35 per cent, track tamping cost 20 per cent and track regaging cost 50 per cent. Photo shows conventional pad (top) and resin compounded pad (bottom) after 1 year's use. Vinylite resin makes the pads resistant to oxidation, sunlight, brine, oil, acids, most solvents, alkali, grit, insects, vermin and fungus and prevents them from becoming brittle in severe cold or soft in extreme heat. Made by **F. Burkart Mfg. Co.**, Second & E. Prairie Sts., St. Louis 7, Mo.

For more details circle NED-5454 on enclosed inquiry slip

BARREL-TYPE CURING PRESS for close-tolerance rubber molding is easily accessible to operator



Demand for press equipment with high platen pressures and low deflection has been met by barrel type curing press for use with synthetic rubbers and transfer molding. These requirements are met without substantially increasing size of press sections or without use of high pressure hydraulic units. Press is adaptable for molding close tolerance items and has circular side plates that conform to the shape of the hydraulic press head. Curved construction contributes to press rigidity. Top and bottom register plates are incorporated.

Press is easily accessible to the operator from both front and rear. Design lends itself to any number of press openings. Ram diameters can be made the same as the platen widths, allowing an increase in platen pressure over conventional presses. Sizes made to date are single and duplex units with 12 x 12-in. platens and medium size units with 32 x 32-in platens. Larger sizes will be available. Made by **Adamson United Co.**, Dept. A, 700 Carroll St., Akron 4, O.

For more details circle NED-5455 on enclosed inquiry slip

step up production with

Stow STREAMLINER N-40

STOW flexible shaft MACHINES

3-SPEED JIFFY SJ-38

These dependable STOW FLEXIBLE SHAFT MACHINES save production time . . . speed up output . . . help lower production costs. Variable Speed Models shown are easily portable . . . cut down operator fatigue and increase on the job efficiency!

Constant Speed Models available. Also complete line of accessories designed to increase the utility of STOW Flexible Shaft Machines!

WRITE TODAY
for your free copy of CATALOG 51

STOW MANUFACTURING CO.
26 Shear St. Binghamton, N. Y.

For more details circle NED-5457 on enclosed inquiry slip

drill

5 to 7 times more holes in concrete

tilden

ROTARY KONKRETE KORE DRILLS

You can drill straight, clean, ready-to-use holes at speeds up to 6 inches per minute—even through steel reinforced concrete. Cuts 5 to 7 times more holes than competitive drills. Special diamond-ground, sintered carbide cutters drill up to 1,000 inches of concrete without resharpening. TILDEN factory precision resharpening is FREE! 29 standard sizes—3/16" to 4" dia.—interchangeable shanks up to 60".

WRITE TODAY for free, illustrated catalog.

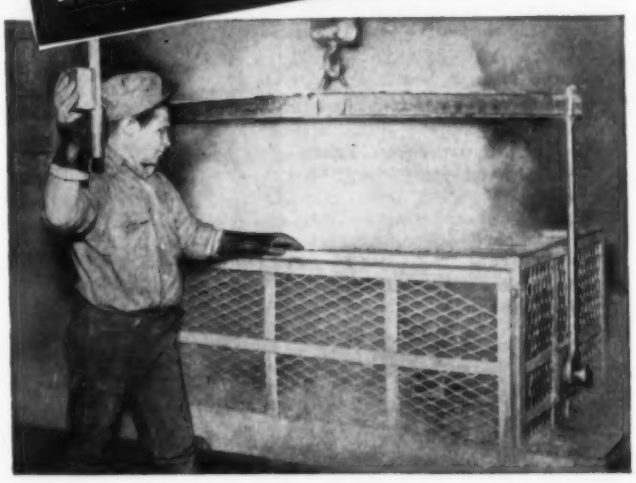
PATENTED CORE SLOT EXPELS CUTTINGS AUTOMATICALLY!
U. S. Pat. No. 2506474

SOLD BY SUPPLY HOUSES EVERYWHERE

TILDEN TOOL Manufacturing Company
209 Los Molinos • San Clemente, Calif.
Branch Offices:
1144 W. Washington Blvd. Chicago 7, Illinois
1995 N. Fair Oaks Avenue Pasadena 3, Calif.

For more details circle NED-5458 on enclosed inquiry slip

Better rubber products are made with Du Pont NEOPRENE



Neoprene-coated fabric gloves resist heat, chemicals, abrasion . . . have long service life

In practically all types of manual operations—even those involving contact with acid fumes and hot caustic—these industrial gloves of neoprene-coated fabric outlast ordinary gloves many times over. They afford the worker maximum protection . . . and the "non-slip" finish insures a firm, safe grip when the surface is wet or oily.

Because neoprene remains flexible throughout its long life, these sturdy gloves are comfortable to wear. The tough neoprene coating will stand up under constant exposure to heat, grease, oil and most chemicals . . . rough handling of sharp metal parts . . . and won't crack with age.

These heavy-duty work gloves are only one of many types of neoprene-coated gloves available for use in factory and home. Neoprene's wide range of properties find application in thousands of other high-quality products, too. While Du Pont makes no finished goods of neoprene, your rubber goods manufacturer or distributor will gladly tell you about the neoprene products he supplies.

FREE! THE NEOPRENE NOTEBOOK

Full of interesting stories. New, unusual applications of neoprene to build new products . . . improve old products . . . reduce maintenance costs. Write today for your free subscription. E. I. du Pont de Nemours & Co. (Inc.), Rubber Chemicals Division O-6, Wilmington 98, Delaware.

NEOPRENE

The rubber made by Du Pont since 1932

DU PONT
REG. U. S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

For more details circle NED-5453 on enclosed inquiry slip

SPEED UP SMALL PARTS ASSEMBLY

Parts feed automatically toward front—end reaching and fumbling.

Bins taper toward front to form convenient semicircle—keep all bins within easy reach.

Stacking, locking construction for rigid set-ups, easily changed when necessary.

All-welded construction. Smooth, folded edges.

New-design, adjustable hoppers provide increased capacity and permit regulated flow of parts according to sizes and weights.

Two-sizes—tapered or straight sides.

IMMEDIATE DELIVERY
Manufactured and sold in Canada exclusively by Wickware-Stackbin, Ltd., Ottawa
Write Stackbin Corp., 1081 Main Street, Pawtucket, R. I.

STACKBIN SYSTEM
"Stacked and Still Accessible"

For more details circle NED-5456 on enclosed inquiry slip

WHEN CONVENTIONAL LUBRICANTS WON'T WORK

USE MOLYKOTE®
INDUSTRY'S MOST VERSATILE LUBRICANT

MOLYKOTE IS INDUSTRY'S NEWEST ADDITION TO THE SMALL FAMILY OF BASIC LUBRICANTS

Its usefulness begins at bearing pressures and temperatures formerly considered extreme or beyond solution.

SEND FOR BULLETIN 93 TODAY.

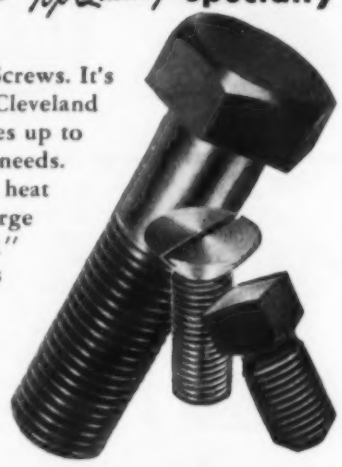
Name .....
Firm .....
Address .....
City ..... Zone ..... State .....
A-101

THE ALPHA CORP.
183 Hamilton Ave. • Greenwich, Conn.

For more details circle NED-5459 on enclosed inquiry slip

BIG cap screws for big jobs

they're a CLEVELAND *Top Quality* specialty



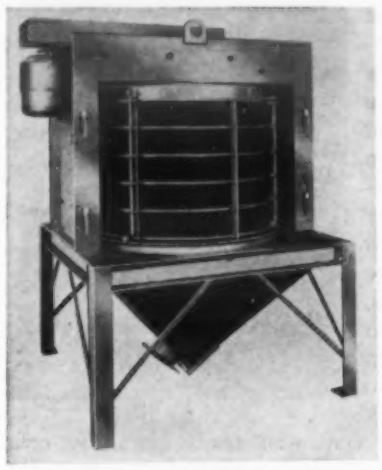
Here's SIZE in Cap Screws. It's good to know that Cleveland can serve you on sizes up to 2½"—lengths to your needs. Hex Heads, bright or heat treated. Also extra large Flat Heads, up to 1" dia. Write for sizes and prices.

Cleveland extra-size cup point Set Screws up to 1½" x 10".

CLEVELAND *Top Quality* FASTENERS
The Cleveland Cap Screw Company
2917 East 79th Street Cleveland 4, Ohio
Warehouses: Chicago, Philadelphia, New York, Providence
ASK YOUR JOBBER FOR CLEVELAND FASTENERS

For more details circle **NED-5460** on enclosed inquiry slip

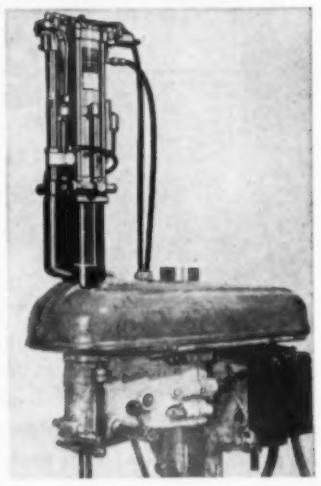
GYRATORY SCREEN
separates wet or dry materials



Sharp separation of wet or dry materials from 4-mesh to very fine meshes is possible with this Symons V Screen. It combines centrifugul action equivalent to five times the force of gravity with gyratory movement to obtain high capacity. Dustless operation is obtained by complete enclosure. Cylindrical screen 3 ft high by 12 ft in circumference is mounted vertically. Using 14 gyrations to each drum revolution assures fast action. Wear is minimized because there is no sliding action. Water sprays are employed in wet screening, with sprays impinging upward and outward. Various types of discharge bases can be furnished. Made by **Nordberg Mfg. Co.**, 3073A S. Chase Ave., Milwaukee 7, Wis.

For more details circle **NED-5462** on enclosed inquiry slip

DEEP HOLE DRILLER
air powered unit for drill presses operates in any plane



Deep hole drilling in any plane is function of air powered automatic deep hole driller attachment for most makes of drill presses, including Buffalo 14, 15 and 18-in. models; Candey-Otto 16 and 18-in. models; Delta 14 and 17-drills; and Walker-Turner 15, and 20-in. and radial models.

Drill begins cycle with rapid approach to work, then feeds into work at predetermined rate for a preset distance which can be varied in increments of 1/16 to ⅝-in. Next cycle is rapid retraction from hole to clear chips and allow coolant to enter. Retraction is followed by advance into hole to drill another increment. Cycles are repeated until total hole depth is reached, at which time drill automatically shuts off. Turn of valve converts drill from step-by-step operation to automatic drill feed with rapid traverse and controlled feed to predetermined depth. Made by **General Pacific Corp.**, Dept. N, 1501 E. Washington Blvd., Los Angeles 21, Calif.

For more details circle **NED-5463** on enclosed inquiry slip

MYSTIK *Self-Stik* DRI-PIPE INSULATION

HOLDS COLD AND HEAT

PREVENTS CONDENSATION

Goes on fast, saves time, cuts costs. Ideal for low-temperature applications—cold water lines, cold air ducts, refrigeration lines. Also used extensively for warm water lines, warm air ducts and for sound deadening.

WRITE NOW for free sample of MYSTIK Self-Stik DRI-PIPE Insulation to Mystik Adhesive Products, 2657 North Kildare, Chicago 39, Illinois

For more details circle **NED-5465** on enclosed inquiry slip

MEETING MILITARY SPECS IS AN OLD STORY FOR T-W USERS

Specifications Mil-W-6860 and 6858 (formerly AN-W-30 and 32) and Taylor-Winfield resistance welding equipment have been partners for years.

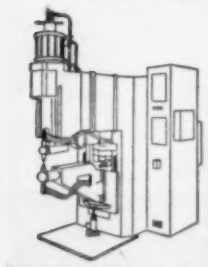
From Taylor-Winfield you can have the efficient Tri-Phase DC or Single Phase Spot and Seam AC welders in many sizes and styles. From Taylor-Winfield you can obtain all the engineering data or field assistance you need to meet your problem, and the welders to do the job.

Let T-W know your requirements. Write, wire or phone.

RESISTANCE WELD

AIRCRAFT FRAMES
JET ENGINE PARTS
•
PROJECTILES
WEAPONS
CONTAINERS
•
ALUMINUM ALLOYS
STAINLESS STEELS
NICKEL ALLOYS
LOW ALLOY STEELS
TITANIUM ALLOYS
LOW CARBON STEEL
ALLOYS OF MAGNESIUM
COPPER AND OTHER MATERIALS

THE TAYLOR-WINFIELD CORPORATION · WARREN, OHIO
Sales and Service In All Principal Cities



TAYLOR-WINFIELD
RESISTANCE WELDERS

Resistance Welders Since 1883

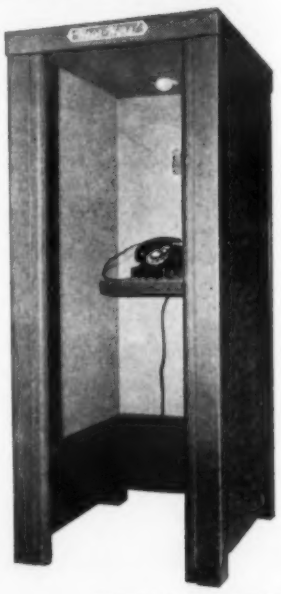
For more details circle **NED-5461** on enclosed inquiry slip

Noise Reduced 50%*

inside a BURGESS-MANNING Acousti-Booth

- Hushed interior . . . a quiet restful place to hear well.
- Light, sturdy construction for ease of moving.
- Doorless construction...light, airy, well ventilated...easy to keep clean.
- Simple construction . . . no moving parts—therefore, easy to maintain.
- Modern in appearance. Suited to any location.

Model 602 Wall Booth



Model 211 Floor Booth

** Based on studies by a prominent research organization.*

Write for Bulletin A107

BURGESS-MANNING COMPANY
Architectural Products Division
5970-C Northwest Highway, Chicago 31, Illinois

For more details circle **NED-5466** on enclosed inquiry slip

PRECISION CIRCULAR CUTTERS

MEYCO carbide tipped and solid carbide cutters have earned an enviable reputation in plants where long tool life and precision workmanship is a MUST.

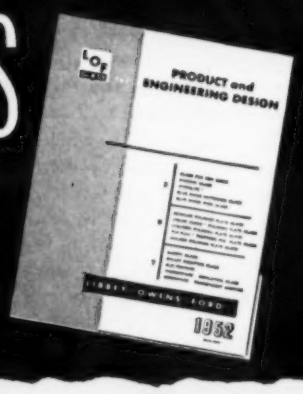
These cutters can be furnished in various diameters and thicknesses to meet the requirements of individual applications.

Saws and cutters, both carbide tipped and solid carbide, will aid production and precision in your slotting, venting, slitting and grooving operations . . . and they will be manufactured to your specifications. Please furnish complete specs and quantities desired when requesting prices and indicate material to be cut. MEYCO experience in the manufacture of precision tools, since 1888, is at your disposal.

W. F. MEYERS CO., INC., BEDFORD, INDIANA

For more details circle **NED-5464** on enclosed inquiry slip

GLASS TIPS



for Designers...P.A.'s

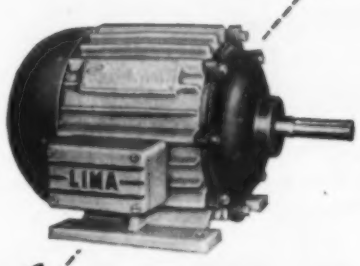
How glass may replace scarce metals in your product. Glass that can be heat resistant—heat absorbent—heat insulating; electrically non-conductive—electrically conductive; patterned or plain—flat or curved—transparent, translucent or opaque. See how L·O·F Glass can help your product.

Write for free bulletin SPD-52

L·O·F GLASS
LIBBEY·OWENS·FORD GLASS COMPANY
9362 NICHOLAS BLDG.
TOLEDO 3, OHIO

For more details circle **NED-5467** on enclosed inquiry slip

MOTORS
as you like them



by.. **LIMA**

★ DRIPPROOF
★ TOTALLY ENCLOSED
★ EXPLOSION-PROOF
★ SHELL-TYPE

⅓ to 150 H. P.

Write today for Bulletin MB-1

LIMA

Representation in principal cities
THE LIMA ELECTRIC MOTOR COMPANY
333 Findlay Road • Lima, Ohio

▲ For more details circle NED-5468 on enclosed inquiry slip ▲

Chem-Board Tote Boxes

HELP BUILD RADAR

Much of the radar needed to scan the skies for our country's safety is being built from materials and parts carried to production lines in Convoy Chem-Board Tote Boxes. The self-stacking boxes illustrated seal their contents from dust and light . . . stack to ceiling without support.

Chem-Board is made of corrugated fibre-board, chemically-impregnated by Convoy's exclusive process. It is flint hard and rock strong. It is not weakened by moisture. It is impervious to machine oils. Convoy Tote Boxes cost and weigh 50% to 60% less than steel. The lightness, toughness and economy of Chem-Board Tote Boxes are unmatched. Tell us the style you use . . . we'll send a free production sample from the next run for you to test. As a guide for present and future availability, our current production capacity is reserved for the unprecedented demands from old customers and "DO" orders. Orders rated DO-MRO are acceptable. Write today.

Standard and Custom-made
Nesting — Stacking — Vertical
CHEM-BOARD TOTE BOXES

CONVOY, INC.
P. O. Station B, Box 216-N
CANTON 6, OHIO

▲ For more details circle NED-5469 on enclosed inquiry slip ▲

UNEQUALLED
for safe, hard blows

C/R JAW-HEAD

A perfectly balanced tool. Tough, resilient water buffalo rawhide faces deliver needed power, yet protect fine finishes and delicate parts. Faces quickly and easily replaceable. Safety-Flare handle gives comfortable grip and prevents slipping. When you need a "soft" hammer, make sure it's a C/R *Rawhide* Jaw-Head.

Faces replaced in seconds

Merely loosening a nut releases jaws for replacing faces. When nut is tightened, faces are held in vise-like grip.

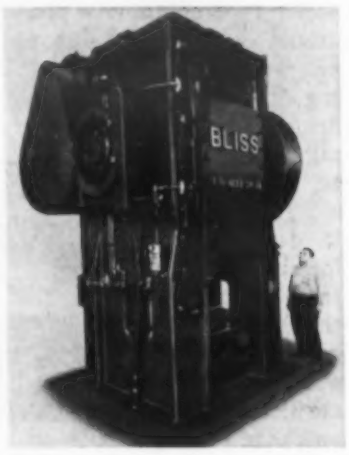
Available from leading industrial suppliers. Also C/R Rawhide mallets, mauls, solid head hammers.

For further information write Dept. 22

CHICAGO Rawhide MFG. CO.
1301 Elston Ave., Chicago 22, Ill.
In Canada: Super Oil Seal Mfg. Co., Ltd., Hamilton, Ontario

▲ For more details circle NED-5470 on enclosed inquiry slip ▲

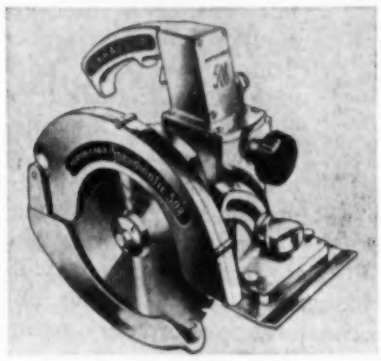
FORGING PRESSES
300 to 4000-ton high speed models



A heavy duty air friction clutch and an air release spring set brake, both mounted on a full eccentric main shaft, are features of improved line of high speed forging presses. Capacities from 300 to 4000 tons are available. The welded steel frame has main stress members located immediately adjacent to either side of the die seat and extending from the bottom of the bed to the top of the crown. Furnished with presses are cam knockout in the slide and a cam liftout in the bed. Die seat is a self-contained unit equipped with easily operated wedge adjusting mechanism. A "buffer" cylinder installed in the crown assists the brake in stopping the heavy slide at top stroke and furnishes additional accelerating force when starting the slide, thus easing the clutch load. A load indicator is standard equipment. Made by **E. W. Bliss Co.**, 13-76 Raff Rd. S. W., Canton, O.

▲ For more details circle NED-5471 on enclosed inquiry slip ▲

PORTABLE ELECTRIC SAW
features kickproof safety clutch and automatic depth adjustment



When the blade of Speedmatic portable electric saws binds in a cut or strikes a knot, its kickproof or friction clutch allows the motor to turn while the blade remains stationary. Two models are available: 507, with 7½-in. blade, cuts from 0 to 2½ in. maximum at 90 degrees and from 0 to 1 27/32-in. at 45 degrees; 508, with an 8-in. blade, cuts from 0 to 2¾ in. at 90 degrees and from 1/32 to 2 in. at 45 degrees. Both operate at 4500 rpm under load and have instant depth and bevel adjustments, safety guard and helical gears. Weights are 15 and 17 lb, respectively. Accessories available are cross-cut gage; special blades for Masonite, plywood and light nonferrous metal; ripping, planer and combination blades; and abrasive disks for scoring tile, stone, asbestos and metal. Made by **Porter-Cable Machine Co.**, Dept. PR-5, 1710 N. Salina St., Syracuse 8, N. Y.

▲ For more details circle NED-5472 on enclosed inquiry slip ▲

You can provide easy mobility to a variety of industrial products with

IRONBOUND ALL-PURPOSE HANDLING UNITS . . .

POPULAR IRONBOUND FLO TRUK

● An easy to handle ruggedly constructed unit for carrying bulky and heavy loads at lowest cost. Seven standard sizes with one or two push handles makes it easy to select the proper truck for your requirements. Ask an Ironbound engineer for suggestions.

The HANDY for furniture and similar items.
The HAULER for cases, crates, tote boxes, etc.
The HUSKY for general use throughout the plant.

THE IRONBOUND "SAFETY-SKID" WITH ROUND CORNERS

Ironbound construction assures long hard use with complete safety to product and operator. Still the time proven method for handling of materials efficiently and economically.

IRONBOUND
BOX & LUMBER COMPANY
Materials Handling Division
55 HOFFMAN PLACE • HILLSIDE, N. J.

MANUFACTURERS OF QUALITY BUILT SKIDS, SEMI-LIVE SKIDS, FLOOR TRUCKS, ROLL TRUCKS, DOLLIES AND PRY BARS

▲ For more details circle NED-5473 on enclosed inquiry slip ▲

MORE PRODUCTION..SAME SPACE

A well-known metal partition manufacturer faced the problem of increasing production without enlarging building. New and better handling methods were obviously needed. They chose an American MonoRail overhead handling system as the best answer to increase capacity without increasing space and with less handling labor. Now, this American MonoRail system handles the steel components from receipt of raw materials, through finishing to shipping. The system boosted production, cut handling labor, improved space utilization, reduced material damage, bettered working conditions, and improved production control.

Let an American MonoRail engineer show you how it can be done in your plant.

THE AMERICAN MONORAIL COMPANY
13116 Athens Avenue • Cleveland 7, Ohio

▲ For more details circle NED-5474 on enclosed inquiry slip ▲

HOW TO GET THE MOST FOR YOUR MONEY!

JUST MECHANIZE your materials handling operations by using CLARK EQUIPMENT. It's as simple as that.

● That's what they all say? Perhaps. But CLARK backs up *its* claim with facts and unmatched performance.

On the questions of . . .

- √ Quality, Longevity
- √ Savings Achieved
- √ Customer Satisfaction
- √ Number of Trucks in Use
- √ Efficiency and Performance
- √ Economy of Operation and Maintenance
- √ Factory and On-The-Ground Service

. . . there is at hand—and available to you—overwhelming evidence that CLARK Serves You Right!

The whys and wherefores are available to you in two new media—the "SERVES YOU RIGHT" edition of our Material Handling News, and our new movie on the use of fork-lift trucks and industrial towing tractors in Plant Maintenance Work.

They'll tell you and show you how CLARK enables you to get the MOST for your money. Just fill out the coupon, attach to your business letterhead and place in your "out-going" mail basket.

CLARK ELECTRIC AND GAS POWERED **FORK TRUCKS**
AND POWERED HAND TRUCKS • INDUSTRIAL TOWING TRACTORS

INDUSTRIAL TRUCK DIVISION • CLARK EQUIPMENT COMPANY • BATTLE CREEK 21, MICHIGAN
Please send: ☐ Material Handling News ☐ Movie "Serves You Right" ☐ Have Representative Call.

Name_____
Firm Name_____
Address_____
City_____ Zone____ State____

AUTHORIZED CLARK INDUSTRIAL TRUCK PARTS AND SERVICE STATIONS IN STRATEGIC LOCATIONS

▲ For more details circle NED-5475 on enclosed inquiry slip ▲

Now More Positive Protection than Ever Before

with the *New* **FLEX-A-FOAM FILTER MASK**

Newly designed for maximum comfort and efficiency, it's easier to breathe through and talk through than an ordinary pocket handkerchief... yet filters non-toxic dusts as small as 1/25000 of an inch!

- Extremely light in weight—just one ounce complete.
- Self-adjusting to every face size—no interference with eye glasses.
- Simple sturdy design—only four interlocking parts.
- Only respirator made with long-lasting washable filter—outwears throw-away type as much as 100 to 1.

Dust Protection your workers will welcome and *Wear*

Sample $1.40 postpaid

★

Write for new descriptive folder

FLEX-A-FOAM FILTER MASK

THE GOGGLE PARTS COMPANY • CLEVELAND 13, OHIO

For more details circle NED-5478 on enclosed inquiry slip

THIS G-E CLEANER

Helps you *Save Money*

Helps you *Save Time*

THESE modern, G-E Heavy-duty Cleaners have many special features:

- They help you cut cleaning time . . . a sure way to cut maintenance costs.
- They switch quickly and easily from wet to dry pickup . . . powerful motors pick up mop water, dust, coarse litter with equal ease.
- They have extra-wide nozzles to cut the cleaning time of larger areas.
- They convert in a moment to *powerful blowers* for quick gathering of scrap into convenient piles for salvage or disposal.
- They have special attachments for cleaning high, hard-to-reach areas thoroughly and quickly.

These are but a few of the features that make G-E industrial cleaning equipment so productive.

MAIL COUPON FOR DETAILS

Heavy-Duty Cleaning Equipment

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, Dept. 22-2630
1285 Boston Ave., Bridgeport 2, Conn.
Without obligation, please send complete details on heavy-duty cleaning equipment.

NAME .....

FIRM .....

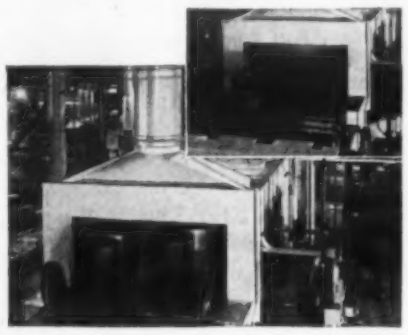
ADDRESS .....

CITY ..... ZONE ..... STATE .....

For more details circle NED-5479 on enclosed inquiry slip

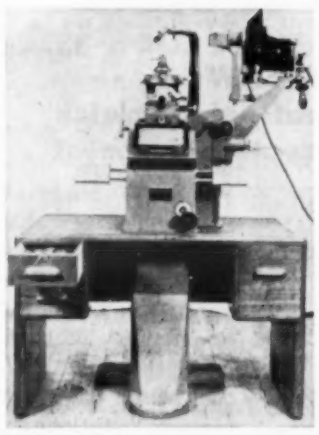
PICKLING & PHOSPHATING MACHINE processes drums for painting

Spray type continuous processing machine for 55-gal drums operates through nine stages comprising alkali wash, sulphuric acid pickling and phosphate coating to prepare drums for painting. Drums can be processed inside and outside, if desired, the former requiring that drums go through machine before ends are welded in. Operation is fast, smooth, easily controlled and safe since all functions are enclosed to protect against fume, odor and splash hazards. Basic principles of machine are adaptable for processing of any product. Made by **Morrison Industries, Inc.**, 17698 Broadway, Bedford, O.



For more details circle NED-5480 on enclosed inquiry slip

PROJECTION MICROSCOPE for studying metallurgical specimens has improved camera and accessories

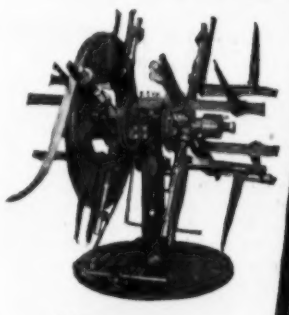


By virtue of its design, the Vickers projection microscope which is used for examination of metallurgical specimens, can be set up to produce photomicrographs of high resolution and flatness of field in low power work with magnifications from 40 to 80 times. A spring-trigger release is fitted to camera for speedy introduction and release of film holders. Camera now takes standard 5 x 7-in. plate or film holder. Available accessories provide means for measuring differences in elevation between range of ordinary microscope, electron microscope and x-ray methods for study of natural crystal surfaces, polished surfaces, thin films and small strains.

Also supplied are accessories for quantitative work in polarized light, either with normal incident or transmitted light illumination. Phase contrast units which can be converted to illumination by positive phase contrast, negative phase contrast, dark field and regular normal incident illumination, are offered as well. Microscope is made by Cooke, Troughton & Simms, Ltd. of England and is distributed by **R. Y. Ferner Co.**, Room 1427, 176 W. Adams St., Chicago 3, Ill.

For more details circle NED-5481 on enclosed inquiry slip

LESS DOWN TIME, MORE PRODUCTION FROM PUNCH PRESSES FED BY



LITTELL DOUBLE AUTOMATIC CENTERING REELS

Vital minutes are saved, with practically no down time for coil replacement, when a Littell Double Reel uncoils stock to the punch press. The idle side of the reel is loaded while the other side pays out. When a coil is used up, the operator simply lifts the hub lock pin, then swivels the reel 180°, thus placing the reserve coil in press feeding position. The changeover is complete in a few seconds. Like Littell Single Reels, Littell Double Reels combine balance that means smooth running accuracy with rugged malleable iron and steel construction that assures year in, year out dependability.

FOUR SIZES
No. 3 . . . . . for coils up to 300 lbs.
No. 5* . . . . for coils up to 600 lbs.
No. 10* . . . . for coils up to 1,000 lbs.
No. 25* . . . . for coils up to 2,500 lbs.
*Can be furnished with motor drive

Write for catalog

F. J. LITTELL MACHINE CO.

ROLL FEEDS • DIAL FEEDS • STRAIGHTENING MACHINES • REELS • AIR BLAST VALVES

4169 N. RAVENSWOOD AVE. • CHICAGO 13, ILL.

District Offices: Detroit, Cleveland

For more details circle NED-5482 on enclosed inquiry slip

ONE MANUFACTURER ORDERED 500 OF THESE NEW, STURDY, PRACTICAL UNIVERSAL STOCK TOTERS!

The handiest truck you can have in your plant. Meets many needs. For line stocking, machine stocking, moving work parts in warehouse, stockroom or shipping room.

Container is 30" long, 24" wide, 10" deep. Overall height from floor to top of unit 34⅛" with 4" casters (35" with 5" casters). Casters at one end are swivel-type. Choice of semisteel or fiber casters. Sturdy angle iron frame with 12-gauge sheet metal on sides and bottom of container. (Note: Container available with sturdy expanded metal sides and bottom if desired.)

The Universal Stock Toter is highly maneuverable, speeds up the job, reduces worker fatigue. It eliminates the manual handling of heavy tote boxes or makeshift containers. Places the work at normal operating elevation. Ideal for assisting in "good housekeeping." Practical, economical for numerous jobs. Moderately priced.

Literature, prices and name of our nearest representative supplied on request.

INDUSTRIAL ENGINEERING & MFG. CO., INC.
BRIMFIELD, INDIANA, U.S.A.

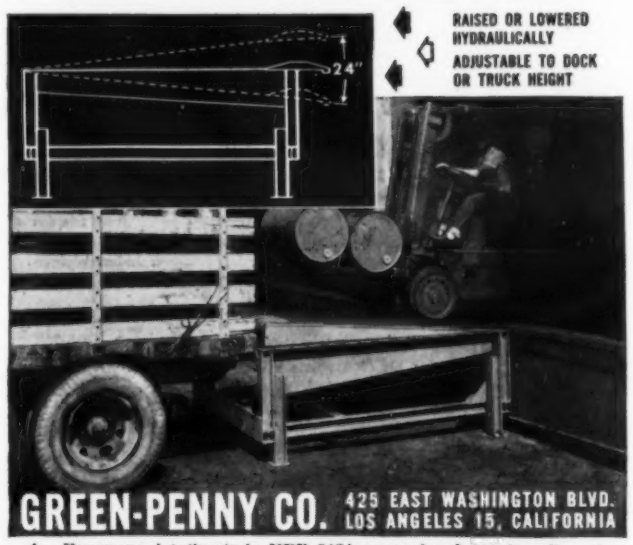
For more details circle NED-5483 on enclosed inquiry slip

HYDRAULICALLY CONTROLLED **adjustable Loading ramp**

No installation is required for the Green-Penny Loading Ramp. Just set in place and plug into convenient 110v. outlet. No costly extras needed. It is adjustable to dock height and is hydraulically raised or lowered to truck bed. "It floats with the bed."

Easy to operate. Single-control lever, flush with the deck, raises or lowers ramp. Deck travel is 24". Capacity 20,000 lbs. Two sizes.

Simplify loading operations and make your shipping department more efficient. Write for Bulletin No. 100.



GREEN-PENNY CO. 425 EAST WASHINGTON BLVD. LOS ANGELES 15, CALIFORNIA

For more details circle NED-5484 on enclosed inquiry slip

NYLINED* BEARINGS

With SMOOTH, TOUGH DuPONT NYLON

SOLVE MANY BEARING PROBLEMS

NYLINED Bearings have a thin liner of DuPont NYLON within an inexpensive metal sleeve. This enables low-cost quantity production and fabrication of trial quantities to customer specifications without a major die investment.

*A BETTER BEARING AT A MODERATE COST

- *Longer life*
- *Lower friction coefficient*
- *Superior without lubrication*
- *Resist chemical attack*
- *Outstanding abrasion resistance*
- *Dampen mechanical vibration*
- *Suitable for close fits*
- *Non-contaminating*
- *Smooth, silent operation*

Write for literature and the name of your local representative.

THOMSON INDUSTRIES, INC. Dept. 6
MANHASSET, NEW YORK

Also Manufacturers of BALL BUSHINGS... the Ball Bearing for Linear Motions

For more details circle NED-5485 on enclosed inquiry slip

SAVE UP TO 85% ON TOOLS-MACHINERY AND PARTS!!

1952-230 PG. CATALOG

Our latest & biggest CATALOG of NEW and SURPLUS BARGAINS. Thousands of items at UNHEARD OF LOW PRICES! SAVINGS UP TO 85% in Hand & Power Tools, Electrical Supplies, Industrial Machinery, Gas & Electric Motors, Winches, Hoists, Machine Tools, Gauges, Welding Equipment, Pneumatic & Air Tools, Raw Stocks, Aluminum, Brass, Copper & Steel in Sheets, Bars, Rods, Tube & Extrusions, Nuts, Bolts, Rivets, Screws, Wire, Cable & a Huge Stock of HYDRAULIC SUPPLIES including Cylinders, Valves, Pumps, Motors, Fittings, Tubing, etc. While these items last we will continue to sell them at typical low Palley Prices. WRITE TODAY FOR YOUR COPY!

WAR SURPLUS SAVINGS

Stationary or Portable ARC WELDER — 97.50

Delivers 300 Amps., continuous — or 350 to 400 Amps., intermittent. Designed to weld continuously for hours . . . This unit is built around a rugged, heavy duty, aircraft type generator and comes complete with pulley reactor, output controls, switches and & rheostat mounted on sturdy steel frame. Operates on 15 H.P. for maximum output. Gas or electric motor. For light or heavy industrial work.

HYDRAULIC PUMP & CYLINDER SPECIALS

Hyd. Variable Displacement PUMP — 32.50

Will deliver maximum volume at any pressure setting between 600 and 900 P.S.I. Pump housing serves as reservoir for system. Has built-in compressed air super-charger which makes system independent of outside atmospheric pressure. Rotation is left hand only. Maximum speed for continuous duty is 3750 R.P.M. Displacement is .484 cu. in. per revolution, or approximately 4 G.P.M. at 1750 R.P.M. . . . . .

Special! HYDRAULIC CYLINDER — 29.95

Gives 20,000 lbs. thrust (push or pull) using 1500 PSI line pressure as obtained from our hydraulic pumps. Will produce up to 40,000 lbs. thrust with 3000 PSI. Can also be used on low pressure air systems. 4" bore; 18" stroke; 30½" length. Ideal for road-farm — shop machinery, etc.

P-3 STRATO POWER PUMP — 19.50

With built-in variable flow control valve on head. Positive displacement piston type. Displacement capacity: 2 gal. per min. at 1500 RPM or 1250 PSI. Pressure limit 1250 PSI continuous. 1400 PSI for 15 sec. Operates at 3750 RPM, intermittent max. 4500 RPM. Rotates either direction without adjustment . .

No. 1 HYDRAULIC CYLINDER — 5.75

Double action. Bore is 1" — Shaft ½". Has stroke of 2½" to 4". Stroke can be adjusted with internal sleeve stops. Overall length is 8½". Will take 1500 lbs. continuous duty. 3000 lbs. intermittent. Will lift or push up to 1100 lbs.

P-4 VICKERS ANGLE PUMP — 19.49

Positive displacement type, angle piston. Displaces .507 cu. in. per revolution. Has capacity of 6 gal. per min. at 3000 RPM at 1500 PSI., continuous, 1875 for 15 sec. Operating speed of 3750 RPM, intermittent maximum, 4500 RPM. Rotates to the right only

FOUR WAY VALVE — 9.75

Poppet type. Pressure balanced. Off at neutral position. Piston type with built-in relief valves for limit of cylinder strokes. 5/8" AH tube size (7/8"-14 thread) inlet & outlet. Ports to cylinder are 1/2" AN tube size 3/4"-16 thread.

PALLEY SUPPLY CO.

DEPT. NED-6
2263 E. Vernon Ave.,
Los Angeles 58, Calif.

Order from this ad. All sales final. All prices F.O.B., Glendale. Pay by M.O. or check. P.O.'s accepted from D.&B. firms. ½ deposit with C.O.D.'s.

For more details circle NED-5486 on enclosed inquiry slip

NOW

F&P Bull's Eye Indicators

STANDARDIZED AND STOCKED FOR PROMPT DELIVERY

Selection of FLOWRATOR Meters and other F&P flow-rate instruments simplified

Standardization of F&P indicating instruments permits quantity manufacture, lower costs, and quicker deliveries.

You can now select flow meters from catalog data to meet your immediate requirements. Engineering charges and manufacturing delays are eliminated.

WRITE FOR NEW "STOCK FLOW METER" BULLETIN

Contains complete data, sizes, and prices with illustrations of F&P instruments now stocked. It lists all F&P sales engineering offices showing which offices carry stock meters.

PROCESS CONTROL INSTRUMENTS

FLOWRATOR

FISCHER & PORTER CO.
DEPT. 2R-ID
HATBORO, PENNSYLVANIA, U. S. A.

RATOSIGHT Flow Indicators

"C-CLAMP" FLOWRATOR Meters

ORI-FLOWRATOR high-capacity by-pass meters

MAGNASIGHT Flow Indicators

Laboratory Flow Test Kits

FLOWRATOR accurate flow measurement meters

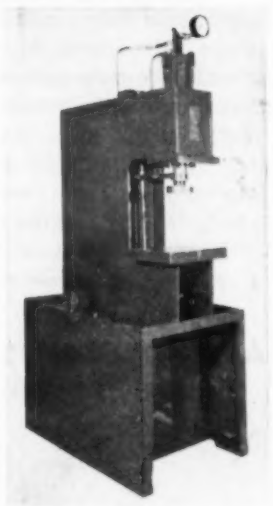
For more details circle NED-5487 on enclosed inquiry slip

HOT PAINT SPRAY UNIT has continuous thermostatic control

Hot paints and lacquers can be sprayed directly from this 6-qt Thermalflo 2-way paint and lacquer heater which has pressure head attachment available as optional equipment. Heater offers continuous thermostatic control which automatically starts heat at any time temperature falls below preset cycle of operating temperature and cuts out at peak of heating cycle. Unit heats 6 qt of paint from 65° to 160° F in about 18 minutes. Pilot light signals when batch is in ideal heat range. Heating element of nichrome wire is 150 sq in., 800 w input blanket type. Heater is available without pressure head attachment for those who prefer to transfer hot paint to standard siphon cups. Made by **Thermalcup, Inc.**, 10120 Detroit Ave., Cleveland 2, O.

For more details circle NED-5488 on enclosed inquiry slip

GAP-TYPE HYDRAULIC PRESSES in 6, 12½, 20 and 30-ton models for punching, forming, drawing uses



Constructed of steel welded heavy plates for minimizing deflection, super model motorized hydraulic gap-type presses are made in 6, 12½, 20 and 30-ton sizes and have respective down stroke speeds of 230, 135, 85 and 55 in. per minute. These floor models have belt driven pumps to absorb shock on drive as press hits pressure. Features include quick reverse action and short dwell period, external drains on piston rod and both ends of four-way valve to eliminate seepage, felt wipers for rod and cylinder, easy adjustment for up and down stroke length, adjustable pressure control and easily operated short-stroke foot pedal.

Presses are driven by 5-hp 220-440-v three-phase 60-cycle motor. Hydraulic system safety valve is adjustable without disconnecting lines and locks with a lock nut. The 6 and 12½-ton models have 8-in. stroke, 9-in. throat, 12-in. daylight opening and stand 88-in. high, while the 20 and 30-ton presses have 6-in. stroke, 8-in. throat, 10-in. daylight and are 91 in. high. Made by **Munton Mfg. Co.**, 9398 Belmont Ave., Franklin Park, Ill.

For more details circle NED-5489 on enclosed inquiry slip

SPO AIR VIBRATORS

BINS HOPPERS — CHUTES — CONVEYORS — PACKAGING TABLES — CONCRETE FORMS — BENCHES SCREENS — MOLDING MACHINES — MATCH PLATES — FATIGUE TESTING

Specify SPO dependable, low-cost air vibrators for all materials handling and foundry applications.

SPO vibrators feature full power starting, hammer-like blows, high-speed operation, long trouble-free service life.

Blow for blow, you can't beat SPO air vibrators! For information on complete line, write today for Bulletin 50.

SPO INCORPORATED
6475 Grand Division Ave. • Cleveland 25, Ohio

For more details circle NED-5490 on enclosed inquiry slip

Here's the money-saving way to
speed car handling

YOU can move cars at a moment's notice when you have a Link-Belt Car Spotter. One man, using a Link-Belt Car Spotter with motor-driven capstan, can easily move up to six loaded railroad cars at a time. Faster loading and unloading minimizes demurrage charges. Link-Belt Car Spotters are built in two sizes with 5 or 10 hp, integral or separate motors, stationary or portable.

Link-Belt's Book No. 2092 describes complete line of car spotters and drum-type pullers.

Get this NEW BOOK

LINK-BELT CAR SPOTTER

LINK-BELT COMPANY: Chicago 9, Indianapolis 6, Philadelphia 40, Atlanta, Houston 1, Minneapolis 5, San Francisco 24, Los Angeles 33, Seattle 4, Toronto 8, Springs (South Africa), Sydney (Australia). Offices in principal cities. 12,822

For more details circle NED-5491 on enclosed inquiry slip

YOU WON'T GO WRONG with a

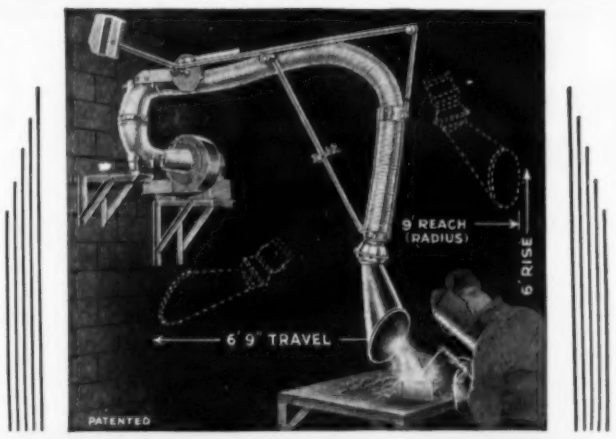
Sta-Warm electrically heated COMPOUND MELTER

There's a size and type of compound melter, with accessories to suit, for almost every production and laboratory requirement. The Sta-Warm "standard" line of pots, kettles and tanks fits 90% of your production requirements. Sta-Warm "engineered" pots, kettles and tanks are offered to fill the unusual requirement. These heaters are designed especially for you.

Are you aware of all that Sta-Warm offers you in compound and soft metal melters today? Inquire, outlining your problem. A reply by early mail, with specific suggestions based on many years of compound heating experience, will come back to you. Why not investigate Sta-Warm today?

Sta-Warm ELECTRIC CO.
130 N. CHESTNUT ST., RAVENNA, OHIO

For more details circle NED-5492 on enclosed inquiry slip



RUEMELIN Fume Collector

Removes Welding Fumes at the Source . . .

Why continue to let your employees inhale welding fumes? You can solve the problem quickly and efficiently by installing a Ruemelin Fume Collector. It produces a powerful suction that draws out noxious gases, smoke and heat at the source. Guards employee health, resulting in less welder fatigue, therefore, greater plant output. Clears shop air with minimum loss of building heat. Covers maximum welding area vertically, horizontally and by circle swing. Shipped assembled, easy to install. 9 ft. and 15 ft. sizes (radius of swing). Write for Bulletin 37-D.

These Fume Collectors are particularly helpful in winter months when doors and windows are closed.

RUEMELIN MFG. CO.
3883 N. PALMER STREET MILWAUKEE 12, WIS., U. S. A.
MANUFACTURERS AND ENGINEERS — SAND BLAST AND DUST COLLECTING EQUIPMENT — WELDING FUME COLLECTORS

A 5258-¼R5

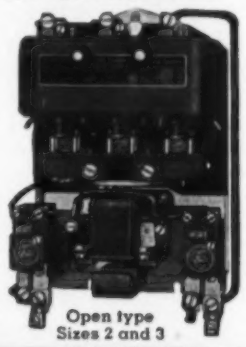
For more details circle NED-5493 on enclosed inquiry slip

CLARK Type "CY"

AC MAGNETIC MOTOR STARTERS *now available in* WATERTIGHT ENCLOSURES

The sensational new CLARK Type "CY" motor starters are offered in a wide variety of types and enclosures for use in such industrial atmospheres as hazardous gas, dust or excessive humidity. Illustrated above, is the NEMA Type 4 Watertight Enclosures, for sizes 0, 1, 2, and 3.

CLARK Type "CY" starters, sizes 2 and 3, have an entirely new arc-quenching principle which greatly increases contact life, by a constant rotation of the arc on contact surfaces.



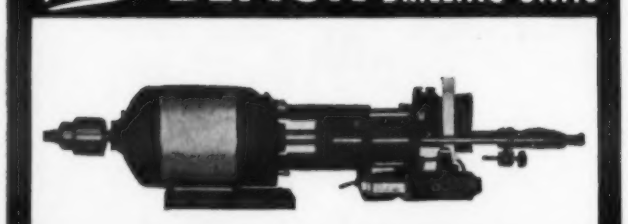
Open type Sizes 2 and 3

Write for descriptive literature.

THE CLARK CONTROLLER CO.
ENGINEERED ELECTRICAL CONTROL • 1146 EAST 152ND STREET, CLEVELAND 10, OHIO

▲ For more details circle **NED-5494** on enclosed inquiry slip ▲

New BLACK SELF-CONTAINED DRILLING UNITS



NO SPLINES	Self-contained units, at low cost, for drilling, tapping, chamfering, reaming and similar operations.
NO GEARS	New principle employs traversing motor shaft for work spindle, applies even torque with practically no end play. Drill has air feed for rapid advance to work—hydraulic control to completion of work cycle with uniform feed. Tapping unit controlled so tap follows its own lead without chamfering first thread or stripping threads on return stroke. Easy adjustment—depth accuracy to within .001".
NO CAMS	
NO CLUTCHES	
NO REVOLVING WEIGHTS	Operate in any position. Wide range of speeds and sizes.

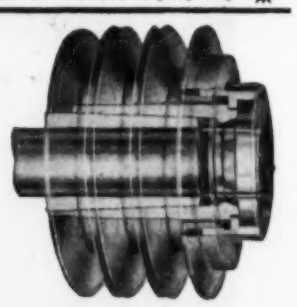
Write for complete information

BLACK DRILL COMPANY, INC.
1360 EAST 222nd STREET CLEVELAND 17, OHIO

▲ For more details circle **NED-5495** on enclosed inquiry slip ▲

WHAT DO YOU KNOW

About Speed Control For Profit?



1. Do you know the exact speeds at which your machines should operate to give you maximum profit?

2. Do you know that the difference between the right speed and almost the right speed is frequently the difference between profit and loss?

3. Do you know that American Adjustable-Speed Sheaves can give you stepless speed control to meet variations in operating conditions and operator efficiency?

4. Want the answers to these and other questions? Then fill in and mail the coupon below today and we'll send you a Free Bulletin with the right answers. Do it now.

THE AMERICAN PULLEY COMPANY
4294 Wissahickon Ave., Philadelphia 29, Pennsylvania
Gentlemen:
Quick! Rush me your complete bulletin on The AMERICAN Adjustable-Speed Line.
Name _____
Address _____
City _____ Zone _____ State _____

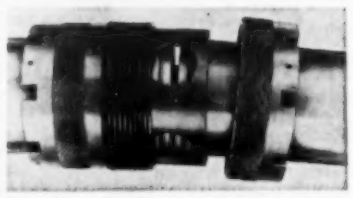
▲ For more details circle **NED-5496** on enclosed inquiry slip ▲

DIE CAST WOOD SCREWS for soft woods and plastics

Manufacturers using such materials as soft woods, composition board and plastics will find practical advantages in using these rust-proof GRC die cast zinc alloy wood screws. Screws are cast and trimmed, ready for surface finishing, in a single automatic operation. Illustrated are No. 1 x ⅜-in. screws with round Frearson heads. A complete line of sizes will be available as well as any type head and driver recess. Threads are cast and can be held to close tolerances because of use of single-cavity precision dies. Made by **Gries Reproducer Corp.**, 780 E. 133rd St., New York 54, N. Y.

▲ For more details circle **NED-5497** on enclosed inquiry slip ▲

FLEXIBLE COUPLING withstands wide temperature range



Pressures in excess of 375 psi and temperatures from −65 to 460° F encountered in fuel and oil lines can be withstood by this flexible coupling. It can be misaligned up to 3 degrees without leaking and tube ends can be separated as much as ½-in. without affecting sealing. End load is absorbed by a metallic retainer. Standard AF 934 O-rings are used. The lightweight coupling can be installed after tubes are in place without making large cutouts. Made by **E. B. Wiggins Oil Tool Co.**, Dept. NED, 3424 E. Olympic Blvd., Los Angeles 23, Calif.

▲ For more details circle **NED-5498** on enclosed inquiry slip ▲

EAR PROTECTORS are close fitting and comfortable

Made of finely woven, pliable wire mesh with soft plastic rims, these ear protectors will protect workers from dirt, flying particles, sparks and other injurious foreign matter without reducing hearing ability. This safety device, designed for workers in hazardous occupations, is close fitting and comfortable. They are available with or without head strap. Made by **Kimball Safety Products, Inc.**, 9308 Wade Park Ave., Cleveland 6, O.

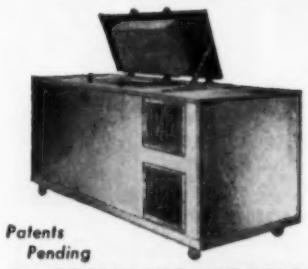
▲ For more details circle **NED-5499** on enclosed inquiry slip ▲

WEBBER

TRADE MARK REGISTERED

INDUSTRIAL FREEZERS

For Shrink Fit·Stabilization of Metals·Hardening and Testing with Temperatures as low as −165°F.



Patents Pending

36 STANDARD MODELS

. . . or built to your specifications at no additional cost

A FREEZER FOR EVERY NEED

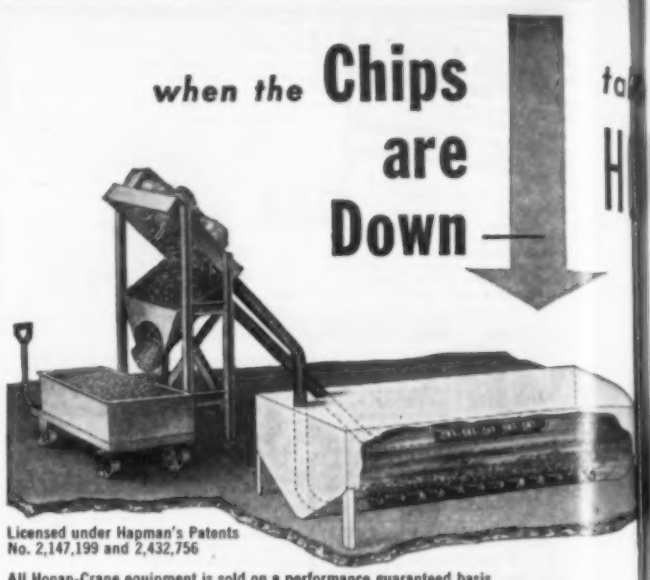
Write for more complete information
Representatives in Most Cities

Used in many of the largest industrial plants, Webber Industrial Freezers are performing heavy-duty, dependable service with extreme accuracy at temperatures as low as −165°F. Lengthens life of valuable cutting tools, eliminates "heat-and-hydraulic-press-fit" methods by the use of shrink and press-fit methods, eliminates warpage and high rejection rate, common with other methods, saves cost of dry ice, amortizes itself in less than one year. Speed production—Save time—Save money with Webber Industrial Freezers.

INDUSTRIAL FREEZER DIVISION
WEBBER APPLIANCE CO., INC.
A-2740 MADISON AVENUE • INDIANAPOLIS 3, INDIANA

▲ For more details circle **NED-5500** on enclosed inquiry slip ▲

when the Chips are Down —



Licensed under Hapman's Patents No. 2,147,199 and 2,432,756

All Honan-Crane equipment is sold on a performance guaranteed basis.

In this large motor car plant, Houdaille Enclosed-Flight Conveyor continuously removes chips from pit beneath twin banks of Bausch 12-Station Transfer Drilling Machine. Chips are deposited into portable hopper for disposal. Houdaille Conveyor is ideal for removing small material from confined area. This installation paid for itself out of savings in one year.

▲ For more details circle NED-[illegible] on enclose[illegible]

MATHEWS CONVEYERS

A TYPE FOR EVERY PACKAGE HANDLING JOB

- WHEEL
- LIVE ROLLER
- SPECIAL CONVEYING MACHINERY
- ELEVATING
- BELT
- ROLLER
- TROLLEY
- PORTABLE

Write today

MATHEWS C[illegible]
GENERAL OFF[illegible]
MATHEWS CONVEYER COMPANY . . .
PACIFIC COAST [illegible]
MATHEWS CONVEYER COMPANY WEST COAST [illegible]
CANADIAN DIV[illegible]
MATHEWS CONVEYER COMPANY, [illegible] . . .
Engineering Offices or Sales Agencies in Principal [illegible]

▲ For more details circle NED-[illegible] on enclo[illegible]

STORE MORE ...

space-saving Work-O-Matic* B[illegible]

IS storage space a problem in your plant? Work-O-Matic Multi-Duty Boxes can really help solve it!

Here *four* Work-O-Matic Boxes are stacked in the same space required for *three* ordinary boxes—33⅓% more storage in the same floor area!

Interesting facts:
1. Stacked height—120" overall.
2. Floor space used for stack of four Work-O-Matic Boxes—11⅔ square feet.
3. Volume of material stored on 11⅔ square feet of floor space—81 cubic feet.

There's nothing like a Work-O-Matic! Find out how these new, drop-bottom boxes have also cut handling costs, and often boost production more than 50%! Write The Union Metal Manufacturing Company, Canton 5, Ohio.

*Patent No. 2,445,038. Other patents pending.

UNION METAL
Materials Handling Equipment

▲ For more details circle NED-[illegible]

ta 'em OUT . . . with a

H UDAILLE CONVEYOR

Automatic System Solves Difficult Chip and Sludge Removal Problems . . . Cuts Costs, Speeds Production

Houdaille Conveyor's automatic loading and continuous materials transport handles any solid or fibrous waste (chips, abrasive sludge, scale, etc.) which settles to the bottom of a tank or hopper. Many plants of all sizes, in many types of operation, have saved substantially on labor, maintenance, down-time and other production costs by installing one or more Houdaille Conveyor systems.

Check these important Houdaille advantages:

- Eliminates costly manual cleaning and handling methods
- Operates continuously or intermittently as needed without shutting down productive machinery
- Readily adaptable to almost any need, any space or traverse requirement . . . ideal for restricted areas
- Dependable, trouble-free automatic operation; requires little or no maintenance attention; quickly pays for itself out of savings.

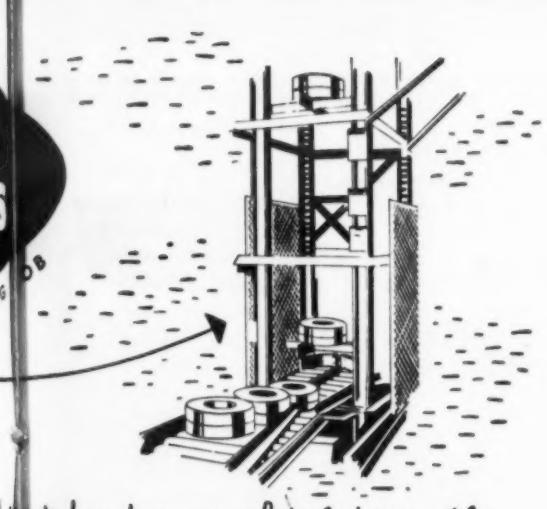
Write for complete information and case histories. Honan-Crane Engineering Service is available.

Honan-Crane Corporation
405 Wabash Avenue, Lebanon, Indiana
Subsidiary of **Houdaille-Hershey Corp.**

LEADING OIL FILTER MANUFACTURER

© 1952, HONAN-CRANE CORP.

circle NED on enclosed inquiry slip



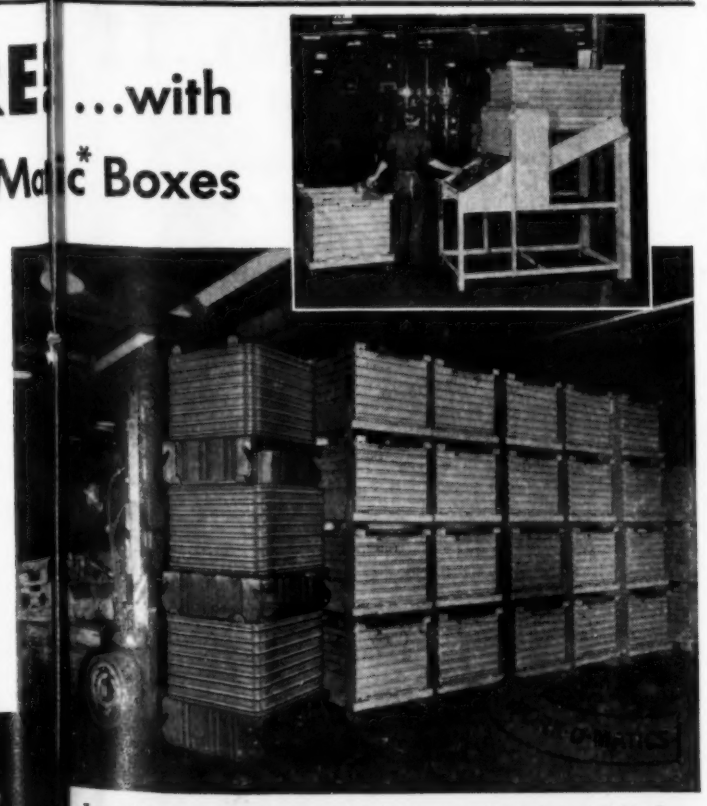
WS
ERS
ANDLING
ING

Write today for complete information

WS CONVEYERS
GENERAL OFFICES
OMPANY . . . ELLWOOD CITY, PENNSYLVANIA
PACIFIC COAST DIVISION
OMPANY WEST COAST . . SAN CARLOS, CALIFORNIA
CANADIAN DIVISION
OMPANY, LTD. . . . . PORT HOPE, ONTARIO
ncies in principal American and Canadian Cities

circle NED on enclosed inquiry slip

RE ...with
O-Matic* Boxes



Inset: Note easy access to materials-in-process when a patented Work-O-Matic Box is used on a Union Metal Positioning Stand. Reservoir supplies operator while empty box is being replaced.

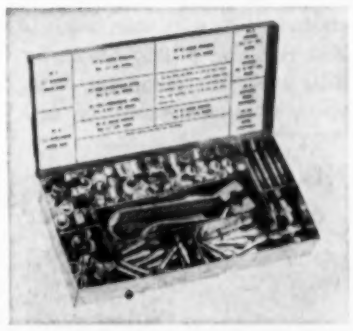
on enclosed inquiry slip

HUMIDITY RESISTANT RESISTOR
wire-wound, vitreous enamel type

Severe performance requirements for characteristic G and J units in joint Army-Navy Specification JAN-R-26A can be withstood by Blue Jacket humidity resistant vitreous enamel wire-wound resistor. Complete range of military styles RW29 to RW39 are made. Thermal expansion characteristics of the ceramic cores, end terminal bands and coating enamel are closely matched to resist violent temperature changes. Made by **Sprague Electric Co.,** 183 Marshall St., North Adams, Mass.

For more details circle NED-5504 on enclosed inquiry slip

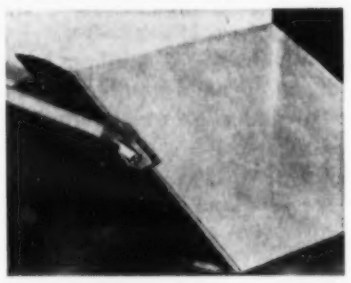
HOSE REPAIR KIT
for welding and cutting hose



Necessary tools and replacement parts are contained in Fast Fix kit to place new nipple-ferrule-nut assembly on end of welding and cutting hose, for permanently splicing two lengths of hose, and for temporarily coupling two lengths of hose. Brass nipples, nuts and couplers, and brass or aluminum ferrules for ¼ or 3/16-in. oxygen or acetylene hose are supplied in compartmented metal box together with two crimping tools. Distributed by **Gas Arc Supply,** 223-K N. Sixteenth St., Philadelphia 2, Pa.

For more details circle NED-5505 on enclosed inquiry slip

CONCRETE FLOOR PAINTER
also used to apply liquid wax



Applying paint or liquid wax to concrete floors without stooping is easy and quick with the Jiffy tool, which consists of 20 x 4½-in. wedge-shaped rubber pad mounted on 54-in. handle. Paint is poured directly on floor then spread by tool operated in push-broom fashion. Tool works to wall edges without smearing. Rubber pad is resilient and hugs even the roughest floors to spread a thin layer of paint evenly. It can be reversed to use other edge and is easily cleaned with damp kerosine rag. Made by **Mico Products Co.,** Dept. A, 170 Gorham Ave., Hamden 14, Conn.

For more details circle NED-5506 on enclosed inquiry slip

For more details circle NED-5507 on enclosed inquiry slip

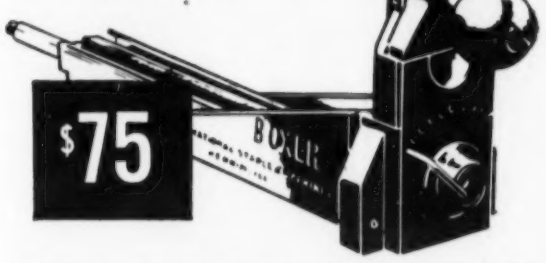
THE NAME TO REMEMBER FOR ENGINEERED
CYCLONE SEPARATORS IS . . .

WRITE FOR DATA SHEET

QUINN BROTHERS INC.
1712 N. 2ND ST.
PHILA. 22, PA.

For more details circle NED-5508 on enclosed inquiry slip

THE INTERNATIONAL
BOXER



PORTABLE STAPLE MACHINE . . . The "Boxer" is a knockout for stapling corrugated or fibre containers. Lightweight (only 4 lbs., 10 oz.) and small (16x3½x7"), it uses the revolutionary International Retractable Anvil . . . stapling filled cartons from the outside. Close your cartons faster . . . neater . . . with fewer staples per unit area, and at less cost per carton.

Write for bulletin No. 101 on the "Boxer." For large daily volume ask about the large automatic Internationals.

INTERNATIONAL STAPLE & MACHINE CO. 802 E. HERRIN ST. HERRIN, ILLINOIS

For more details circle NED-5509 on enclosed inquiry slip

Now Spray On design layout ink

"JUST PRESS THE BUTTON ON THE CAN"

Faster! Easier!

No brush, no waste, no mess! Self-pressurized can sprays on CROWN Design Layout Ink in fine mist that dries to hard surface in a minute. Dark blue is standard—other colors on volume purchases.

ORDER TODAY!
$1.59 PER 12-OZ. CAN
15% discount in cases of 12
Additional discount for larger quantities
FOB Sycamore, Illinois

CROWN INDUSTRIAL PRODUCTS CO.
406 Borden Ave., Sycamore, Illinois
Please ship at once
_____(how many?) cans
_____(how many?) cases
CROWN Design Layout Ink
Name_____
Company_____
Our Purchase Order No._____
Address_____
City_____Zone____State_____

For more details circle NED-5510 on enclosed inquiry slip

BARRETT
Nifty-Lifter
SYSTEM
Simple · Safe · Low-Cost

Nifty-Lifter skids are available with platforms (as illustrated). Also — Pipe or Wood Stake type • End Rack type • Box type • Shelf type

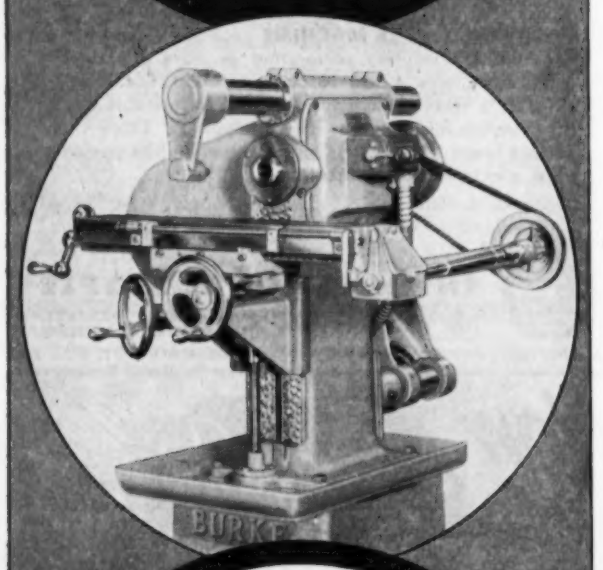
The Barrett Nifty-Lifter gives you a complete materials handling system at a surprisingly low cost. Operator merely wheels Nifty-Lifter under lifting horn on skid. Downward handle motion lifts skid legs clear of floor. Further lowering of handle releases latch; load settles gently under full control. Popular skid sizes, 24" to 36" wide, meet any product handling requirement. 1000 to 4000 lb. capacities. Simple, husky, long-lasting. An outstanding value! *Ask for prices.*

BARRETT-CRAVENS COMPANY
4623 S. Western Blvd., Chicago 9, Illinois
Representatives in All Principal Cities
Canadian Licensee: S. A. Armstrong, Ltd., Toronto, Canada

BARRETT
One man does more than 3 or 4...with a Barrett

For more details circle NED-5511 on enclosed inquiry slip

SPEED PRODUCTION
OF SMALL PARTS
AT SMALL COST
with dependable
BURKE
BENCH MILLERS



Bear-for-work Burkes, in hand and power feed models are cutting time and cost on jobs formerly done on big millers in many modern production lines. Versatile Burkes are also on duty in thousands of tool, development, repair and school shops. Send for circulars describing models and attachments.

THE Burke MACHINE TOOL CO.
A Division of U. S.-BURKE MACHINE TOOL CO.
BROTHERTON ROAD 2, CINCINNATI 27, OHIO

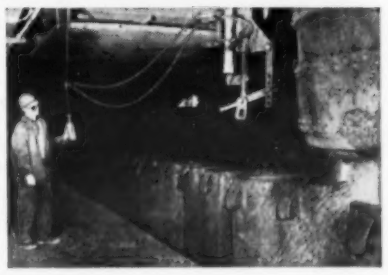
For more details circle NED-5512 on enclosed inquiry slip

POWER CUTOFF SAW for metallic pipe and tubing

Super Speed abrasive saw is designed for quick, accurate cutting of aluminum, copper, stainless steel and other metal pipe and tubing with various wall thicknesses. It operates on 110-v ac. A heavy duty abrasive disk slices through the metal, leaving smooth, square, undistorted ends. Saw has a free-moving rotating frame which encompasses the piece to be cut. Cutting unit is attached to frame so that both units rotate together. Operator sets tool to make the desired cut, then rotates it 360 degrees until cut is complete. Saw is easily secured to any bench or bench vise and is quickly adjusted to any size tube or pipe. Made by **Tri-Clover Machine Co.**, 2910 60th St., Kenosha, Wis.

For more details circle NED-5513 on enclosed inquiry slip

HYDRAULIC POURING CONTROL remotely opens, closes ladle stopper



Safety is increased and manual labor decreased by the Autopour, a hydraulic device that makes possible teeming of ingots from ladles some distance away by remote pushbutton control. Device also contributes to quality improvement to the extent that surface quality is affected by pouring practice. Hydraulic pressure for opening and closing the stopper is limited only by the physical strength of stopper rigging. Hence, greater opening and closing force can be exerted, leakers and dribbles are minimized and stopper sticking is reduced. An adjustable pressure relief valve can be set so that the force cannot exceed the safe operating pressure for any given ladle rigging. Made by **Blaw-Knox Co.**, Steel Plant & Equipment Dept., 2068 Farmers Bank Bldg., Pittsburgh 22, Pa.

For more details circle NED-5514 on enclosed inquiry slip

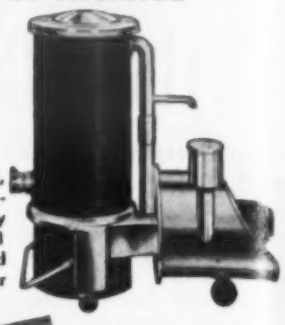
PLASTIC CARBOYS for carrying corrosive liquids are made in 6½ and 13 gal capacities

A solution to problem of safely transporting bulk quantities of poisonous or corrosive acids and caustic materials is afforded by these Plaxpak smashproof polyethelene plastic bottles now available in 6½ and 13 gal capacities. Bottles are blow-molded in one piece, then jacketed in phenolic-bonded water resistant plywood with four-ply walls supported with three-ply hoops securely stapled on each end, and with five-ply heads and bottoms. Construction results in an unbreakable carboy that meets Bureau of Explosives recommendation for ICC approval to ship hydrofluoric and electrolyte sulphuric acids. Other liquids which can be shipped in carboys are acetic, fluoboric, muriatic, and formic acids, caustic soda solution, hydrogen peroxide, pharmaceuticals and photographic chemicals.

Carboy units will withstand flexing and expanding effects of freezing liquids or high altitudes. They are constructed round for minimum space requirements and have 0.1-in. wall thickness. Each bottle has heavy-wall molded plastic screw cap with separate plastic inner liner. A dome shaped phenolic outer screw cap protects neck against puncture by sharp objects. Tare weight of 13-gal unit is 29 lb and of 6½-gal unit is 17 lb. Made by **Plax Corp.**, 672 Farmington Ave., West Hartford, Conn.

For more details circle NED-5515 on enclosed inquiry slip

HEAVY DUTY POWER
IN A LIGHTWEIGHT PACKAGE
WITH SPENCER PORTABLE VACUUM CLEANERS



For heavy duty general cleaning, offices, hallways, laboratories, conference rooms, etc....wet pick-up...dry mop cleaning...3 models (½, ¾ and 1 H. P.), sturdily built for long, hard service. (Larger machines available for plant use.)

WRITE DEPT. NE FOR DETAILS

THE SPENCER TURBINE COMPANY • HARTFORD 6, CONNECTICUT
SPENCER HARTFORD

1SP52

For more details circle NED-5516 on enclosed inquiry slip

Tell Us Your Production Problems... We'll Help You Solve Them

"LOGAN" AIR-DRAULIC® FEED-CONTROLLED CYLINDERS
Combines
the fast-acting, economical, low pressure operation of AIR
with the smooth, uniform controlled regulation of OIL

• Power Movements In Any Direction
• No Power Unit Required

5 STANDARD MOUNTING TYPES
• Standard bores from 3" to 8". Any stroke to 5 ft. For air pressures to 150 p.s.i.

Furnished for controlled feed with rapid return in either direction, or with controlled feed in both directions. Skip feed movement can also be provided.

ILLUSTRATED... AIR-DRAULIC CYLINDER WITH FLANGE MOUNTING AT ROD END

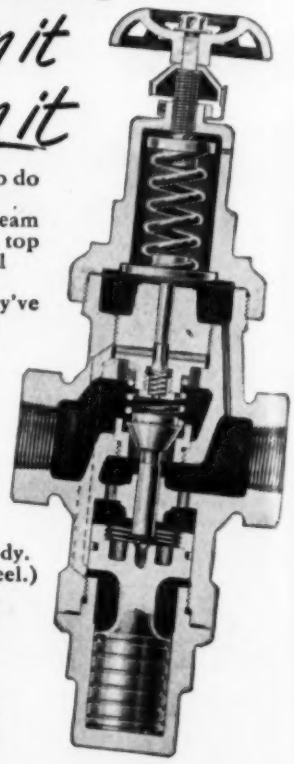
Logan Manufactures 6,975 Standard Cataloged Items
Free Catalog On Request
AIR CONTROL VALVES CATALOG 100-4
AIR CHUCKS CATALOG 70-1
AIR CYLINDERS CATALOG 100-1
AIR and HYDRAULIC PRESSES CATALOG 51
COLLET GRIP TUBE FITTINGS CATALOG 44
HYDRAULIC CONTROL VALVES CATALOG 200-4
HYDRAULIC CYLINDERS CATALOG 200-2; ALSO 200-3
HYDRAULIC POWER UNITS CATALOG 200-1
SURE-FLOW COOLANT PUMPS CATALOG 62

Let Logan Engineers help you design your Air and Hydraulic Circuits.

Logan SAVES TIME EFFORT MOTION
Air and Hydraulic Equipment
LOGANSPORT MACHINE CO., INC. 808 Center Ave. Logansport, Ind.
FLUID POWER SPECIALISTS SINCE 1916

For more details circle NED-5517 on enclosed inquiry slip

Masoneilan No. 11
Pressure Reducing Valve
Just Clean it to Maintain it



Ordinarily that's all you have to do to keep this better-than-ever Masoneilan Pilot Operated Steam Pressure Reducing Valve in top operating condition. Users tell us it's the most accurate, dependable reducing valve they've ever installed. Service records indicate maintenance consists of little more than keeping the moving parts clean.

Easy to service, too — all parts may be removed with the valve in the line.

Initial pressures up to 250 lbs. reduced to any desired pressure between 10 and 90 lbs. or 75 and 225 lbs. Sizes ½" to 2" with bronze body. (Also available in iron and steel.)

Call your local Mason-Neilan Industrial Distributor for fast, dependable service.

MASONEILAN
MASON-NEILAN REGULATOR CO.
1189 Adams Street, Boston 24, Mass.

For more details circle NED-5518 on enclosed inquiry slip

Simple
Accurate
Convenient

Industrial NOISE SURVEYS

TO:
- Improve the performance of Industrial Equipment and Household Appliances
- Protect Persons Working Near Noisy Equipment
- Assist in Design and Construction of Buildings Suitable for Housing Noisy Machinery
- Improve Working Conditions of Office and Shop Personnel

The G-R Sound-Survey Meter *is a very small, pocket-size, self-contained and inexpensive meter for showing the level of noise. It has a range of 40 to 136 db above the standard reference level. It weighs only 1 pound 14 ounces with batteries. Only two controls, both on the face of the instrument, are used. It can be operated on a bench, a table, a tripod or in the hand.*

This meter is proving very useful for all types of preliminary noise-level measurements. It can be operated successfully by anyone. Write For the SOUND-SURVEY METER Bulletin.

TYPE 1555-A Sound-Survey Meter: $125

GENERAL RADIO Company 275 Massachusetts Ave., Cambridge 39, Mass.
90 West St. NEW YORK 6 920 South Michigan Ave. CHICAGO 5
1000 North Seward St. LOS ANGELES 38

For more details circle NED-5519 on enclosed inquiry slip

VISIBILITY

ACCESSIBILITY

COMPACTNESS

R-B-M

AC MAGNETIC STARTERS

The R-B-M melamine arc chamber extinguishes the arc of loads far in excess of maximum ratings, without impairing the accessibility of the stationary and movable contact assemblies.

A quick glance immediately shows which overload has tripped.

R-B-M puts more usable contact material at the center of arcing to provide greater wear before replacement.

Magnet and coil assembly, as well as stationary and movable contacts, can be removed independently of other components by using only a screwdriver and without disconnecting external wiring.

Write Dept. K-6 for Bulletin 605

RBM **R-B-M DIVISION ESSEX WIRE CORP.** *Logansport, Indiana*
MANUAL AND MAGNETIC ELECTRIC CONTROLS FOR AUTOMOTIVE, INDUSTRIAL, COMMUNICATION AND ELECTRONIC USE

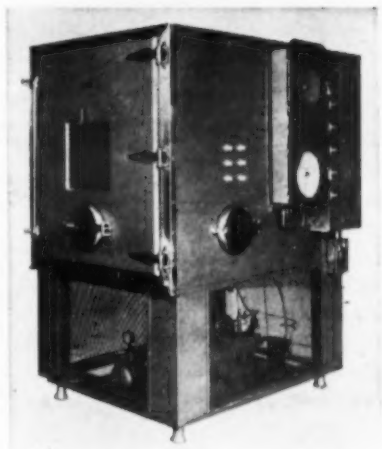
For more details circle NED-5520 on enclosed inquiry slip

HYDRAULIC JACK
125-lb unit has 50 tons capacity

Built especially for heavy rigging jobs, 50-ton capacity hydraulic jack is constructed of heat treated cast and welded alloy steel. Unit stands 16 in. high and has large 10 x 12-in. base which serves to minimize cribbing damage. Top guide and piston portion that contacts cylinder is manganese bronze to prevent scoring. Oil housing and cylinder are welded to cast base to eliminate oil leakage and increase strength. Dual, high and low pressure pumps raise ram to 10 in., allowing for 6 or 8-in. cribbing. Two lifting handles also protect piston from being bent, and each operator can take same length of stroke on pumps. Made by **Wm. S. Pine**, 1637-A E. 22nd St., Los Angeles 11, Calif.

For more details circle NED-5521 on enclosed inquiry slip

HUMIDITY TESTING CABINET
supplies 20 to 95 per cent humidity in 35° to 185° F range



Relative humidity between 20 and 95 per cent in 35° F to 185° F temperature range can be supplied by this humidity testing cabinet with 27 cu ft working area. Hermetically sealed refrigeration unit and electric heating system assure accurate temperature regulation, and condensation is minimized through use of high capacity condensing system. Glass viewing panel with wiper, two stainless hand hole ports, vaporproof interior light, forced air circulation and adjustable shelf brackets are standard features.

Six electrical leads introduced into stainless working space provide quick connection to electrical equipment under test. Temperature and humidity control switches are mounted on externally locked control panel with pilot light for each circuit. Time schedule control system for presetting dry and wet bulb temperatures is optional. Made by **Murphy & Miller, Inc.**, 1326 S. Michigan Ave., Chicago 5, Ill.

For more details circle NED-5522 on enclosed inquiry slip

1 AMP TOOL FOR ALL TYPES OF WIRE

CRIMPS AMP SOLDERLESS TERMINALS AND CONNECTORS ON ALL KINDS OF WIRE FROM #22 TO #10

This handy tool will crimp 3 sizes of AMP SOLISTRAND* terminals on solid, stranded, irregular shaped conductors, or combinations of them. AMP "CERTI-CRIMP*" ratchet holds terminal while wire is being inserted and WILL NOT RELEASE TOOL JAWS UNTIL YOU HAVE MADE A PRECISION CRIMP. AMP crimping dies are plug gauged to ±.003" tolerance in release position!

AMP *Trade-Mark
AMP Trade-Mark Reg. U. S. Pat. Office

AIRCRAFT-MARINE PRODUCTS, INC.
2100 Paxton Street, Harrisburg, Pa.

For more details circle NED-5523 on enclosed inquiry slip

Here's the Easier, Low Cost Way to Feed Bulk Material —

hot, cold, damp, dry, fine, lumpy — at rates from pounds to hundreds of tons per hour.

SYNTRON "Vibra-Flow"

VIBRATORY FEEDERS

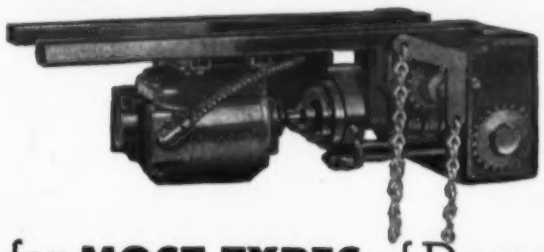
Efficient, low cost operation — due to electromagnetic vibratory principle — using no motors, gears, belts, sprockets, etc., and with adaptability to your present processing system with a minimum of change.

SYNTRON CO.
405 Lexington Ave.
Homer City, Pa.

Write for FREE Catalog Folder

For more details circle NED-5524 on enclosed inquiry slip

ONE Electric Operator



for **MOST TYPES** of Doors

"BARCOL" EQUIPMENT REDUCES MAINTENANCE COSTS...

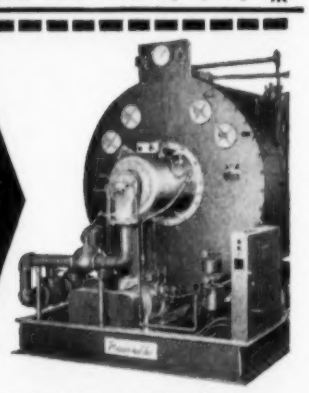
This Barcol Electric Door Operator will handle *any* type of overhead, sliding, or steel-rolling door, or sliding gate. Thus ONE make of operator can handle *all the powered doors* in your plant. Your maintenance department, then, stocks only a minimum of stand-by parts. Sole responsibility for helping with your problems rests with ONE factory representative. In this way, costs are reduced and convenience and service are greatly increased. See your "Barcol" representative for detailed suggestions. ASK FOR LITERATURE.

Factory-Trained Sales and Service Representatives in Principal Cities

BARCOL **BARBER-COLMAN COMPANY**
108 MILL STREET, ROCKFORD, ILLINOIS

For more details circle NED-5525 on enclosed inquiry slip

ONLY THE *Powermaster*® GIVES YOU *VORIFLOW*® COMBUSTION!



Latest Development in Burner Design Saves Fuel and Man-Hours

1. Wide range modulation between high and low fire at full efficiency—you use less fuel. 2. Freedom from carbon cuts clean-up time and expense—usually by 50%. 3. Change from oil to gas (or gas to oil) in a few minutes.

To Cut Your Steam Costs Mail Coupon Today

ORR & SEMBOWER, INC. • 930 Morgantown Road • Reading, Pa.
Please send my free copy of the POWERMASTER catalog.

NAME _____ TITLE _____
(Please Print)
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

For more details circle NED-5526 on enclosed inquiry slip

Their Good Looks Help Sell Your Original Equipment!

PIC STEEL UNIONS

You get eye-catching brightness as well as strength with a Pic — the 150 lb. steel union that's tailor-made for makers of original equipment. Ends are uniformly flat-sided for speedy installing with open end wrenches and the steel pipe coupling stock can take the most punishing wrenching. Special wedge-type bronze seat locks the union tight. Complete zinc plating (even on threads) says "no!" to rust. The cost? *Less* than a galvanized, *no more* than a black malleable union.

Write for Free Samples!

DART UNION COMPANY
132 Thurbers Avenue,
Providence 5, R. I.

For more details circle NED-5527 on enclosed inquiry slip

RANDALL PILLOW BLOCKS

Controlled lubrication to all parts of the bearing surface is assured by an exclusive Randall feature. Porous graphite feed plugs extend through the wall of the bronze bearing and by capillary action feed oil from the "deep well" reservoir to the graphited grooves of the bearing. These grooves distribute the oil to all parts of the bearing surface. Heat increases the capillary action of the graphite thus increasing flow of oil and assuring proper lubrication at elevated temperatures. When heat subsides, flow of oil is automatically reduced.

Randall pillow blocks have a reputation for extremely quiet operation, extra long life and trouble-free operation. Completely self-aligning, most styles can be mounted in horizontal, vertical or inverted positions and are available for light, normal or heavy duty on shafts from 1/2" to 3 5/16" inclusive. Remember, there's a Randall that's right for every type application.

For more detailed information write for catalog No. 109 today or send your specifications.

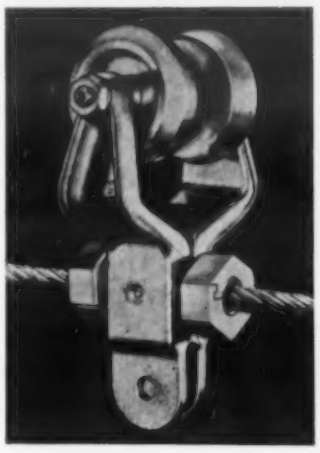
BRONZE BAR STOCK — GRAPHITED BEARINGS
BRONZE BUSHINGS — THRUST WASHERS
PILLOW BLOCKS — BABBITT METALS
SHEET LUBRICATOR — SAFETY COLLARS

Randall

RANDALL GRAPHITE BEARINGS, INC.
1007 S. Greenlawn Ave. Lima, Ohio

For more details circle NED-5528 on enclosed inquiry slip

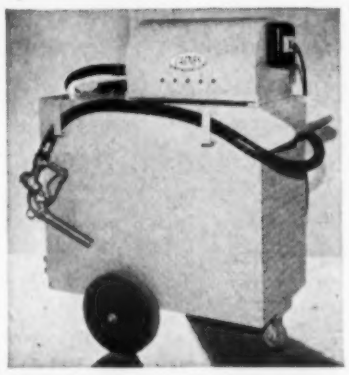
CABLE CONVEYOR SYSTEM for light and heavy duty handling



Heavy duty as well as lightweight materials handling is possible with overhead monorail cable conveyor system which uses 9/16-in. steel core cable to join trolley brackets. Cable passes through internally serrated sleeves of split bracket assembly. Split nut is brought together on sleeve and turned on the expanding threads of the taper to establish a 360-degree biting hold on cable. In this position, trolley brackets can withstand pull loads up to 10,800 lb without slipping. Made by **Daigle-Gaboury, Inc.**, Dept. NE, 20175 John R, Detroit 3, Mich.

For more details circle NED-5529 on enclosed inquiry slip

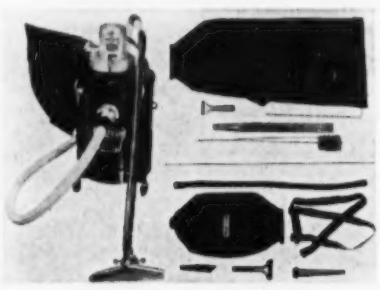
OIL & COOLANT DISPENSER pumps in or out of unit



Equipped with an electrically driven pump, model 110-R-4 oil and coolant dispensing unit has a four-way valve to permit pumping in or out of the unit. The discharge hose has a trigger type nozzle. Standard unit has capacity of 75 gal and is equipped with a 4-in. hinged fill opening and a 4-in. plug type cleanout door. Dispenser is mounted on 12-in. semipneumatic rubber tired wheels, or can be furnished with 30-in. steel wheels. Made by **W. R. Carnes Co.**, Dept. D, S. Main St., Verona, Wis.

For more details circle NED-5530 on enclosed inquiry slip

BLOWER-VACUUM CLEANER applicable for industrial use



All types of cleaning operations are handled readily with model VB-100 Vac-Blower with detachable head and wide selection of cleaning attachments. It can be used for cleaning furnaces, radiators, overhead pipes, lighting fixtures, instruments, stock bins, storage racks, machinery, motors, floors, upholstery and hard-to-get-at places. Heavy duty universal 1-hp motor delivers high velocity air stream for blowing or concentrated suction of 46-in. water lift for wet or dry vacuuming. Ball bearings are prelubricated and sealed. Made by **Multi-Clean Products, Inc.**, 2275-79 Ford Parkway, St. Paul 1, Minn.

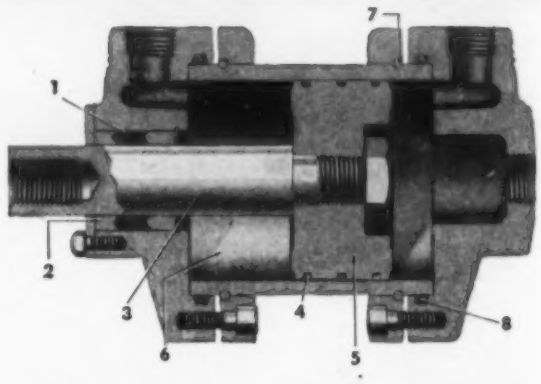
For more details circle NED-5531 on enclosed inquiry slip

CHIP-EJECTING PIPE DIE cuts uniformly clean, true threads

Problems of clogging and torn threads encountered in threading pipe are overcome by the chip-ejecting feature of this pipe die, offered in pipe sizes from 1/8 to 2 in. Dies are interchangeable in all Reed solid die threaders and cut uniformly clean, true threads for tight joints. Chip-ejecting and ease of cutting result from design and rake of the two opposed chasers which make the major cuts. Long, curled turnings are cut and fed out and away from the work. Double-threaded throat permits threading of pipe up to 2 in. without use of a lead screw and eliminates need for pushing or forcing the die in starting. Made by **Reed Mfg. Co.**, 1452 W. Eighth St., Erie, Pa.

For more details circle NED-5532 on enclosed inquiry slip

Hydraulic Cylinders



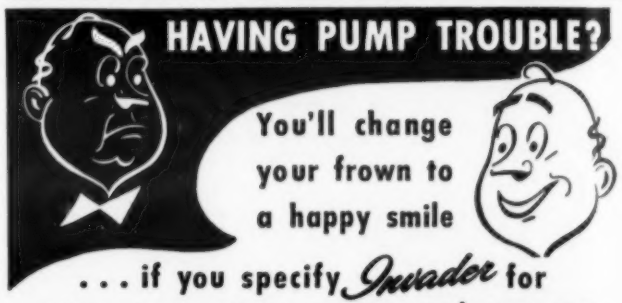
1. Self-adjusting rod packing.
2. Ample bronze rod guide.
3. Over-size, ground and polished alloy piston rod.
4. Closely-fitted step-seal-cut piston rings.
5. Heavy duty alloy cast pistons with large bearing surfaces.
6. Seamless drawn steel tubing, precision honed.
7. Keeper rings eliminate tie rods. Permit rotation of covers to convenient pipe locations.
8. "O" ring seals eliminate gaskets. Assure leak-proof operation.

Available in 300 P. S. I. and 1500 P. S. I. 3000 P. S. I. furnished. 7 mountings; 10 bores; strokes to 96"; standard or 2:1 over-size rod; cushioning. Send for Cat. 105.

RIVETT LATHE & GRINDER INC.
Brighton 35, Boston, Mass., Dept. NED-6

For more details circle NED-5533 on enclosed inquiry slip

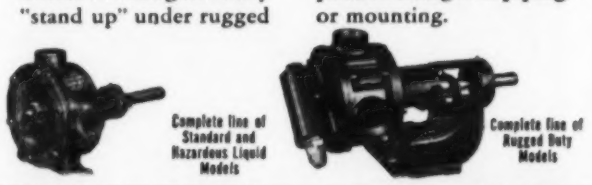
HAVING PUMP TROUBLE?



You'll change your frown to a happy smile

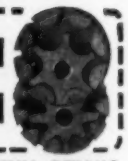
... if you specify *Invader* for your next rotary pump replacement

INVADER Pumps are engineered to perform better ... longer. They "stand up" under rugged conditions. Will fit your equipment with no expensive changes in piping or mounting.



Rounded tooth design is one of the "inside" reasons why INVADER Pumps last longer ... give better service. The positive seal and rolling contact represent a big improvement over the old-style construction of gear-within-a-gear rotary pumps.

"INVADER" CONSTRUCTION
OLD-STYLE CONSTRUCTION



FOR ORIGINAL EQUIPMENT AND MAINTENANCE. FULL DETAILS IN ILLUSTRATED BULLETIN 2003N. GET YOUR COPY TODAY!

The SCHIRMER-DORNBIRER PUMP Co.
1719 EAST 39th STREET CLEVELAND 14, OHIO

For more details circle NED-5534 on enclosed inquiry slip

for better marking use

MARKEM®

FOR MARKING PRODUCTS, PARTS, PACKAGES, TAPES, TAGS, LABELS — FLAT, CURVED, IRREGULAR SURFACES

THE MARKEM METHOD
Markem machines, types, and inks constitute a better method for marking the products of industry. Markem equipment is engineered to solve special marking problems. Behind the Markem method lies nearly half a century of marking experience which may be applied to your marking problem.

MARKEM MARKING MACHINES
There is a Markem marking machine for practically every marking purpose — for *direct marking* of product packages, products, and product parts — for *imprinting* labels, tags, tapes, and special gummed, pressure-sensitive or heat-seal backed material, or for producing *complete labels*. Makes up to many thousand durable imprints per hour on almost any kind of material. No special skill needed to operate. Legend and color of imprint quickly and easily changed.

MAKE YOUR MARK WITH MARKEM
Whether you make saws or sox, spark plugs or shoes, TV tubes or tachometers, drugs or hand grenades — whatever your marking problem — find out how easily and economically the Markem method can handle it. Just send a sample of the item to be marked and details of your needs to Markem Machine Company, Keene 3, New Hampshire.

MARKEM
BETTER MARKING SINCE 1911

For more details circle NED-5535 on enclosed inquiry slip

DUST REMOVAL costs less with DUSTUBE®

HERE'S WHY

- Dustube Collectors control dust and fume with virtually 100% efficiency.
- Operating and maintenance costs are unusually low due to a unique simplicity of operation.
- Material is collected in a dry state and can be re-used without thickening, filtering or drying.
- Power costs are low.

WRITE TODAY FOR CATALOG 72-B

American dustube® COLLECTORS
WHEELABRATOR & EQUIPMENT CORP.
508 S. Byrkit St., Mishawaka 8, Ind.

▲ For more details circle NED-5536 on enclosed inquiry slip ▲

HOW TO IMPROVE YOUR PRODUCTS AT LOW COST

Design around Permaclad
STAINLESS CLAD STEEL

Now you can improve your products and equipment—give them gleaming corrosion resistance—without wasting critical materials. Design and build with PERMACLAD Stainless Clad Steel.

Full technical data and fabricating suggestions are yours for the asking. Write for your copy of our new 8-page folder—P-72.

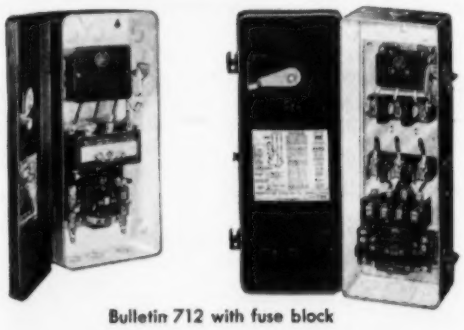
FOR BETTER PRODUCTS AT LOW COST . . . SPECIFY PERMACLAD

STEEL SCRAP FIGHTS FOR DEFENSE. SELL YOUR SCRAP NOW!

PERMACLAD
STAINLESS CLAD STEEL
ALAN WOOD STEEL COMPANY
CONSHOHOCKEN, PA.
Over 125 Years of Iron and Steel Making Experience

Other Products: A.W. ALGRIP Abrasive Floor Plate • A.W. SUPER-DIAMOND Floor Plate • Plates • Sheets • Strip • (Alloy and Special Grades)

▲ For more details circle NED-5537 on enclosed inquiry slip ▲



Bulletin 712 with unfused disconnect switch

Bulletin 712 with fuse block

QUALITY Combination Starters that Reduce Your Installation Costs

In applications where the Electrical Code specifies that a manual disconnect unit must be used . . . ahead of your automatic starters . . . don't use TWO separate units. Install an Allen-Bradley Bulletin 712 Combination Starter. It combines both units in one handy cabinet and makes a neater, compact, up-to-date installation. Available in many types of special purpose enclosures.

Allen-Bradley Co., 1334 S. Second St., Milwaukee 4, Wis.

ALLEN-BRADLEY
QUALITY
MOTOR CONTROL

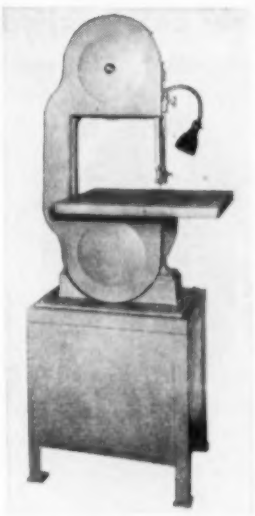
▲ For more details circle NED-5538 on enclosed inquiry slip ▲

GUMMED TAPE DISPENSER is useable in any position

Cartons can be sealed or resealed where filled by making use of the Roll-On-Sealer, a portable gummed tape dispenser. It has a nonspilling water tank and can be used upright, on its side or upside down. Machine rolls freshly moistened tape directly onto the carton, then a twist of the wrist cuts it to the desired length. Tape can be dispensed to any legnth, up to an entire 600-ft roll of sealing or reinforced filament type, in widths up to 3 in. Only maintenance required on 2½-lb machine is refilling the water tank, rinsing out the moistening sponge and replacing worn cutter blades. Offered by **Mid-States Gummed Paper Co.**, 2513 S. Damen Ave., Chicago 8, Ill.

▲ For more details circle NED-5539 on enclosed inquiry slip ▲

BAND SAW has 20 x 23-in. tilting table



Model 14K band saw with 20 x 23-in. tilting table has vertical capacity of 12½ in. (table top to wheel guard) and horizontal capacity of 13¾ in. (blade to main guard). The 14-in. saw has frame and base of heavy grey iron and steel. Table is ribbed cast iron. The easily adjustable motor base requires no belt tightening device. Upper and lower wheel guard is one piece and hinged for changing blades. A free-turning hand wheel raises or lowers the large dynamically balanced upper wheel for setting blade tension. Made by **St. Paul Foundry & Mfg. Co.**, Heston & Anderson Div., 607 Kirkwood Ave., Fairfield, Iowa.

▲ For more details circle NED-5540 on enclosed inquiry slip ▲

ELECTRIC MELTING POT heat is thermostatically regulated

Rite-Hete electric melting pots and tanks for asphalt, plastics, waxes, enamels, paste, putty and other materials are equipped with heat controls that can be set by hand control knob for any temperature from 100° F to 450° F. Popular use is for dip coating parts, tools and machinery with plastic for protection against rust, dirt and corrosion. Type R tanks or cookers, from 5 to 20 gal, have Robertshaw control, stand, cover, agitator and quick-opening valves. Type H units, from 25 to 100 gal or more, are offered with Honeywell control, stand, cover, agitator and quick-opening valves. Made by **Rohne Electric Mfg. Co.**, 22A E. Hennepin Ave., Minneapolis 1, Minn.

▲ For more details circle NED-5541 on enclosed inquiry slip ▲

HOPPER-EQUIPPED TRUCK has 80 cu ft, 4000-lb capacity

Loads of loose material, such as sand, gravel, sawdust, waste, metal chips, ashes and scrap can be handled by this 4000-lb capacity high lift platform truck with an 80 cu ft end-dump hopper. Truck is standard electric model with shortened platform to accommodate the hopper which can be tilted downward to scoop up loads. It can also be loaded from overhead. Platform elevating mechanism is used to dump the hopper. Made by **Yale & Towne Mfg. Co.**, Philadelphia Div., Dept. M-1, Roosevelt Blvd. & Haldeman Ave., Philadelphia 15, Pa.

▲ For more details circle NED-5542 on enclosed inquiry slip ▲

SPEEDY AIR VISE

SPEEDS UP
✓ MILLING ✓ PUNCHING
✓ DRILLING ✓ BENDING
✓ TAPPING ✓ RIVETING

GRIPPING FORCE 15 TIMES AIR LINE PRESSURE

Speedy Air Vise helps you do dozens of operations faster, better, cheaper—by air pressure! Foot control valve opens and shuts vise instantly, leaving *both* hands free to produce *more!* Jaw opens up to 3 inches, holds castings, parts, jigs, etc. Compact and trouble-free.

Complete with Foot Control, Air Hose and Fittings.....only $29.90

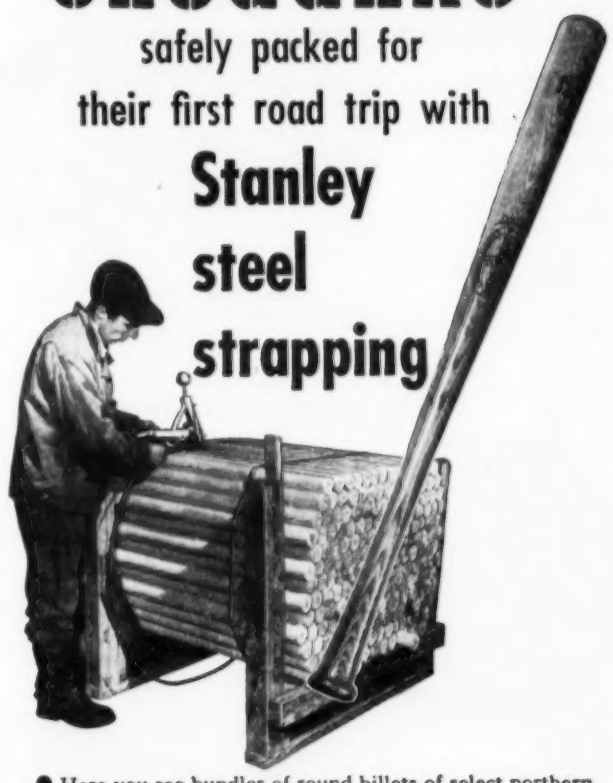
Prompt Delivery from Your Supplier or Write Direct

W. R. BROWN CORPORATION • 2647 N. Normandy Ave. • Chicago 35, Ill.

AIR REGULATORS • AIR FILTERS • AIR GUNS • PORTABLE COMPRESSORS

▲ For more details circle NED-5543 on enclosed inquiry slip ▲

"LOUISVILLE SLUGGERS" safely packed for their first road trip with Stanley steel strapping



● Here you see bundles of round billets of select northern white ash, ready for shipment to the Hillerich & Bradsby Company where they'll be made into world-famous "Louisville Sluggers".

To the shipper, The Norton Wood Products Co. of Tidioute, Penn., it was important that these baseball bats-to-be arrived at their destination undamaged. They solved this problem by calling in a Stanley Steel Strapping Representative, and with his help developed the bundle pictured here that proved successful in hundreds of subsequent shipments.

And this is just another example of how the Stanley Steel Strapping System and modern shipping methods save man-hours — materials — money — shipping almost any product.

The complete System includes tools, reels, seals, strapping, and accessories—everything needed for your application. The Stanley Works, Steel Strapping Division, New Britain, Conn. Branch Offices or Representatives in 32 principal cities. For full information send coupon below.

STANLEY
Reg. U. S. Pat. Off.
STEEL STRAPPING AND CAR BANDING SYSTEMS

HARDWARE • TOOLS • ELECTRIC TOOLS • STEEL STRAPPING • STEEL

The Stanley Works, Steel Strapping Division
209 Lake St., New Britain, Conn.

Please ask your Representative to call and explain the advantages of the Stanley Steel Strapping System to me.

Name _____
Firm Name _____
Street _____
City and State _____

▲ For more details circle NED-5544 on enclosed inquiry slip ▲

Attention! INSTRUMENT ENGINEERS and PLANT ENGINEERS

Get This Information-Packed Literature Now If you specify, buy or maintain instruments that record, control or measure temperature and or pressure, then you should have a complete set of Gotham catalogs in your file.

Write for these data-filled catalogs today.

Keep Everything Under Control With Gotham

GOTHAM INSTRUMENTS

DIVISION OF AMERICAN MACHINE AND METALS, INC.
Dept. 1, 233 Broadway, New York, N. Y.

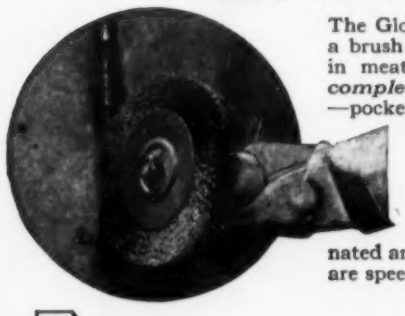
For more details circle NED-5545 on enclosed inquiry slip

How Pittsburgh Brushes IMPROVE QUALITY!

1. Finishing stainless steel sheets!

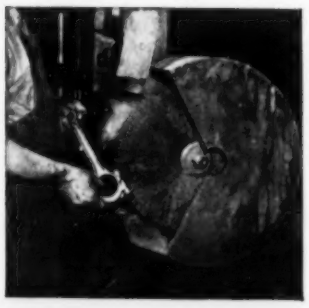
Brushes formerly used by the Eastern Stainless Steel Corp. to produce a dull satin finish on stainless steel sheets were unsatisfactory. Ridging and uneven finish had to be eliminated from these sheets, used to press laminated plastics. Pittsburgh engineers recommended a Spiral Wound Tampico rotary brush—now uniform finishes are no problem!

2. Cleaning welds!

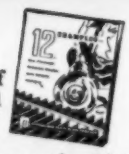


The Globe Company required a brush that would get welds in meat handling equipment *completely clean* and smooth—pockets left in welds might trap food particles. Pittsburgh suggested a coarse wire, extra heavy fill rotary brush. Now pockets are completely eliminated and finishing operations are speeded up.

3. Reconditioning automotive connecting rods!



How to rid reconditioned engine rods of grease, gum, etc., without harming precision surfaces? When Federal Mogul Service presented this problem to Pittsburgh engineers, Pittsburgh recommended a number of standard brushes, mounted on two- and four-horsepower motors. One man now cleans up to 500 pieces a day, *without damage* . . . problem solved!



Let Pittsburgh Engineers Solve Your Brush Problems. Pittsburgh's complete line of brushes of every type, for every purpose, will provide a practical and economical solution of any brush problem you might have. Drop us a line on your company letterhead for a copy of our new booklet that shows, through actual case histories, how Pittsburgh brushes can help cut your operating costs. Address: PITTSBURGH PLATE GLASS COMPANY, *Brush Div.*, Dept. M-4, 3221 Frederick Ave., Baltimore 29, Md.

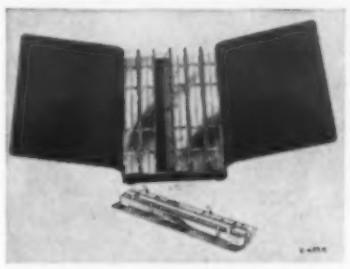
PITTSBURGH *Power Driven* BRUSHES

BRUSHES • PAINTS • GLASS • CHEMICALS • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

For more details circle NED-5546 on enclosed inquiry slip

QUICK-CHANGE CATALOG RACK available in six and nine unit sizes



Price lists and comprehensive catalogs are kept up-to-date readily with this Quick-Change catalog rack. Desired section can be removed by pressing release, and new listing can be inserted without disturbing other inserts. Catalogs stay wide open on curved prongs so that entire page is visible. Rack is mounted on 30-degree base for convenient use on desk, table or counter, and rubber feet protect surface. Binders are equipped with four prongs, or three pairs of prongs spaced to fit standard ring book punching. Rack is supplied in six and nine unit sizes. More units can be added easily by removing wing nut support and adjustable brace, sliding the hinges of the two bases together and replacing the hinge rod. Made by **Diebold, Inc.**, Dept. EF, Canton 2, O.

For more details circle NED-5547 on enclosed inquiry slip

AUTOMATIC FIRE EXTINGUISHER features corrosionproof construction

Constructed with tough corrosionproof plastic case over glass container and mounted with cadmium plated hangers, ceiling type automatic Safety Spray fire extinguisher operates whenever fire breaks out. Heat rising to ceiling releases fusible clip which frees a coiled spring built into lower section. This causes plunger to shatter the glass container and release carbon terachloride extinguishing agent. This liquid vaporizes quickly from heat of fire to envelop and smother it quickly. If desired, glass bulb can be removed quickly from container and fluid thrown directly over fire. Replacement bulb is available. Made by **Red Comet, Inc.**, 22-A Red Comet Bldg., Littleton, Colo.

For more details circle NED-5548 on enclosed inquiry slip

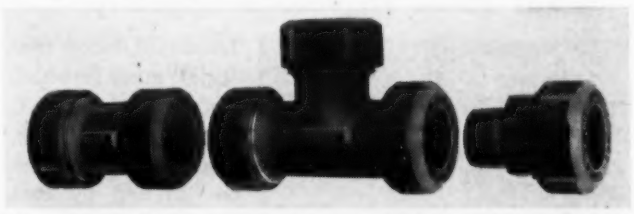
ROLLER CHAIN FASTENERS can be reused almost indefinitely

Chain roller fasteners called Rollpins, which reportedly outlast cotter pins ten to one, are now available on most larger pitches of both standard and heavy series Morse roller chains. Fastener is chamfered-end, slotted steel cylinder that compresses easily into pin hole smaller than its own diameter and expands and locks in place until deliberately removed by hammer and punch. It can be reused almost indefinitely and has same shear strength to cold rolled pins of same diameter. Chain made by **Morse Chain Co.**, Dept. ND, 7601 Central Ave., Detroit 10, Mich.

For more details circle NED-5549 on enclosed inquiry slip

THREADLESS MALLEABLE FITTINGS join standard plastic or steel pipe

Ten different types and 111 different sizes are offered in Telsco line of malleable iron threadless fittings for joining standard size plastic and steel pipe. Fit-



tings available are couplings, adapters, 90-degree elbows, adapter elbows, straight and reducing tees, tees with threaded branches, reducers and increasers. Size range is ½ through 2 in. Fittings are factory-assembled and ready to use on plain end pipe without threading. Fittings are not affected by air, water, gas, gasoline, butane or propane and withstand temperatures from 250 to 275° F. Gaskets are Neoprene. Made by **Texas Lawn Sprinkler Co.**, Telsco Fittings Div., 5424 Redfield St., Dallas, Tex.

For more details circle NED-5550 on enclosed inquiry slip

TAL PORTABLE BENDERS Complete ALL Piping Jobs FASTER

AND Reduce
- Number of Fittings Needed
- Cutting, Threading and Welding
- Errors and Work Spoilage
- Overall Installation Cost

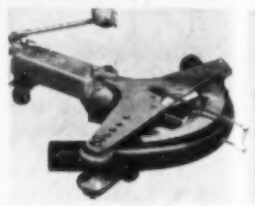
Where pipe and tubing must be installed for new plant equipment or maintenance jobs, you can *save fittings . . . save time* for cutting and threading or welding . . . with a Tal Portable Bender.

On-the-job bending is a real money-saver for installation of steam and water pipe, radiant heat tubing, electric conduit, compressed air or hydraulic lines, coolant pipe and similar work.

No experience is necessary to quickly produce smooth, wrinkle-free bends and offsets in just one setting—without shifting the pipe. Worker fatigue is reduced. The time of experienced men is saved for more complicated jobs.

GET SUPERIOR WORK

Smooth, streamlined pipe jobs made up by bending are equal to



or better than piping with screwed or welded fittings. Each joint eliminated will also eliminate a potential leak, and a point where foreign matter may collect. Unrestricted flow is assured—head loss is minimized.

Save money . . . get superior work. Learn how you can speed up plant piping jobs with a Tal Portable Bender.

COMPLETE LINE OF BENDERS FOR:
1. Offsets and bends to 180°.
2. Pipe and rigid conduit to 8" dia.
3. Copper and thin wall tubing.

Write for this Free Bulletin

Tal Bender, Inc. Dept. 4 Milwaukee 2, Wis.

For more details circle NED-5551 on enclosed inquiry slip

For more details circle NED-5552 on enclosed inquiry slip

BOOSTED PRODUCTION 233%

Problem: How to soft solder five joints on gas tanks.

Old Way: Air-gas torch soldering.

New Way: 20-kw Allis-Chalmers induction heater with five station fixture.

Results: Production increased from 15 to 50 tanks per man-hour. New handling methods will increase production even more.

WHETHER YOUR JOB is soldering, brazing, hardening, or annealing, it will pay you to investigate Allis-Chalmers Induction Heaters and find out about the spectacular savings you can make. In fact, there may be complete data on a job similar to yours already processed in A-C's electronic laboratory. Simply call your nearby Allis-Chalmers district office and outline your heating problems, or write Allis-Chalmers, Milwaukee 1, Wis.

ALLIS-CHALMERS A-3647

For more details circle NED-5553 on enclosed inquiry slip

PRECISION IN ALLOY STEEL TUBE SAVES MATERIAL, TIME-LOSS

CLOSE TOLERANCE . . . Tubing having O.D., I.D. dimension spread of .002" and concentricity within 10% of the wall thickness was needed by a Superior customer to save extensive machining operations with consequent time and material losses. Manufacturer of precision ball bearings, this customer forms both inner and outer races of E-52100 tubing where bar stock was formerly used . . . the savings are well worth having—the bearings perform even better than before.

YOU, TOO may have a need for fine small tubing that can help solve a fabrication or performance problem. Superior can probably help. Check your needs against our production of tubing in all analyses from .010" to 5/8" O.D. and in certain analyses (.035" max. wall) up to 1 3/8" O.D. Write for information and free literature today.

SUPERIOR TUBE COMPANY
2018 Germantown Avenue
Norristown, Pennsylvania

For more details circle **NED-5554** on enclosed inquiry slip

MAKE THIS FREE TEST

and discover for yourself there's no better direct positive print paper

NOW you can have longer-lasting direct prints that fairly sparkle with contrast

You get blacker-than-ever lines on whiter-than-ever backgrounds with DIRECTO, the new, improved Dietzgen semi-dry process that gives you ready-to-use direct positive prints in seconds. DIRECTO prints fight wear and tear, and even when oil-soaked, grime-smeared, sweat-stained they retain amazing legibility.

You are assured of uniformity because DIRECTO developing solution is chemically stable, always brings out strong black images, whether mixed fresh or old. And there's no washing, no lengthy drying, no negative needed. DIRECTO prints are made direct from your translucent original.

Compare this remarkable material with any other you have ever used. DIRECTO is available now with blue, pink, yellow and green backgrounds, as well as white, for convenient color coding. Send for samples.

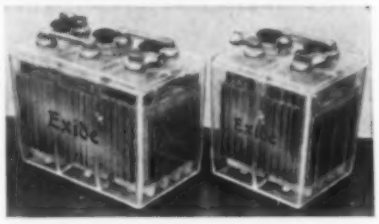
EUGENE DIETZGEN CO. • Chicago • New York • San Francisco • New Orleans • Los Angeles • Pittsburgh • Washington • Philadelphia • Milwaukee • *Dealers in All Principal Cities*

DIETZGEN
EVERYTHING FOR DRAFTING SURVEYING & PRINTMAKING

Free Samples!

For more details circle **NED-5555** on enclosed inquiry slip

STORAGE BATTERIES
heavy duty two and three-cell units feature unbreakable plastic cases



Space and weight savings, easy maintenance and dependability are advantages reported for Exide type PLX storage batteries for stationary and industrial applications. Transparent polystyrene case is practically unbreakable, and level of electrolyte shows at a glance. Markings on transparent case indicate recommended high and low electrolyte levels. Built into each outer cell is chamber in which red, white and blue balls float when battery is fully charged. Blue ball sinks when battery is one-tenth discharged, and white ball sinks when it is one-third discharged. When two-thirds discharged, the red ball goes down.

Automatic venting device prevents excessive gas accumulation. Two cell batteries have 50-amp-hr capacity at 8-hr rate, while three-cell units have 100 amp-hr capacity at this rate. Batteries can be used in combinations to supply any desired range of voltages. Clear plastic cover is cemented in place. Positive plates are flanked by spun glass Vitrex retainers, against which are placed slotted plastic plate protectors. The latter, in turn, are held apart by microporous rubber separators. Made by **Electric Storage Battery Co.**, Dept. 1-AD, P. O. Box 8109, Philadelphia 1, Pa.

For more details circle **NED-5556** on enclosed inquiry slip

CHIP & PART SEPARATOR
grades different chip sizes

Effective separating of parts from deburring and finishing chips and grading of different sizes of chips are functions performed by this two-deck machine.

It attains compactness by locating the hopper at the top of the machine. Floor space required is 3 x 8 ft with pans. Parts separation is effected without danger of impingement to parts. Conversion to chip grading is by turning a cam. Three sizes of chips are graded at one time, and screen sizes for various chip sizes are available. Welded steel unit is powered by a 3/4-hp variable speed drive. Made by **Grav-i-Flo Corp.**, Dept. NED1, 400 Norwood Ave., Sturgis, Mich.

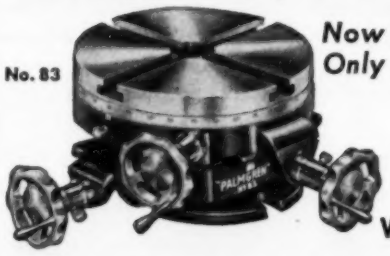
For more details circle **NED-5557** on enclosed inquiry slip

DUAL CROSS and ROTARY FEED

PALMGREN

Rotary, Index, Milling Table

No. 83



Now Only $54.50

Turns Your DRILL PRESS Into A VERTICAL MILLER

Think what this will mean in your shop! Can be used on any Drill Press, Lathe or Milling Machine and provides what is practically a universal milling machine.

Designed for use in all types of metal and woodworking shops. A precision table permitting fine work to close tolerances. It is accurate, speedy, well constructed and attaches quickly in a firm position.

Rotary feed calibrated in degrees; Cross feed in thousandths; Dual Cross Slide with cross feed 2 1/8" each side of center or 4 1/4" overall. Has acme thread cross feed screws, adjustable gibs on cross slides. 40 to 1 worm and gear ratio in rotary feed. Equipped with bolt slots and locking screws.

No. 83 Table Dia. 8", T-Slots 3/8", Base Keyway 3/8", Base Dia. 6 1/4", Ht. 5", Wt. 37 lbs. Price Only $54.50. Other Types available, No. 82 Dual Cross Feed only $43.75; No. 86 Rotary Feed Only $46.75.

Order Today! If dealer can't supply, write us. Ask for Circular No. 10

CHICAGO TOOL and ENGINEERING CO.
Mfrs. of PALMGREN PRODUCTS Since 1918
8378 South Chicago Ave. • Chicago 17, Ill.

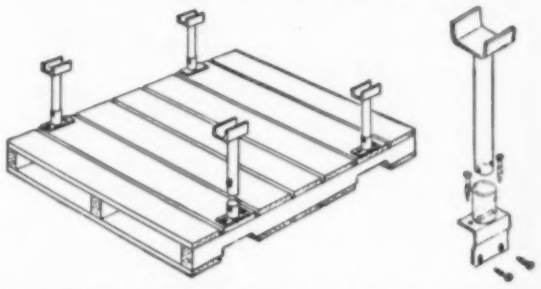
For more details circle **NED-5558** on enclosed inquiry slip

NOW—practically ANYTHING can be palletized

"ECONO-MISER" Hardware

. . . a PALTIER Job Tool

low priced tiering hardware of high quality for use where clear, vertical opening does not exceed 24" and loads are not over 1500 lbs.



Inexpensive hardware converts standard 2-way or 4-way pallets into STACKING PALLETS at a lower cost than ever before possible—utilizes storage space to greater advantage; permits mechanical handling.

Hardware consists of four tubular steel corner posts with 3-inch steel channels welded at top, four tubular steel receiving sockets and lag screws for attaching sockets to pallets. Cost is approximately one-half of usual stacking hardware.

Get the Facts Today! Write

THE PALTIER CORPORATION
1701 KENTUCKY STREET • MICHIGAN CITY, INDIANA
DISTRIBUTORS IN PRINCIPAL CITIES

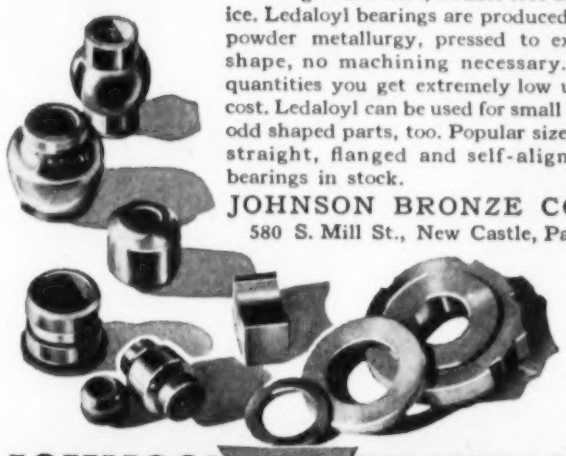
For more details circle **NED-5559** on enclosed inquiry slip

Great MONEY-SAVERS where applicable . . .

Ledaloyl SELF LUBRICATING REG. U. S. PAT. OFF.

bearings and parts

Write for Johnson Catalog



IN the right application, they give low cost, trouble-free service. Ledaloyl bearings are produced by powder metallurgy, pressed to exact shape, no machining necessary. In quantities you get extremely low unit cost. Ledaloyl can be used for small and odd shaped parts, too. Popular sizes of straight, flanged and self-aligning bearings in stock.

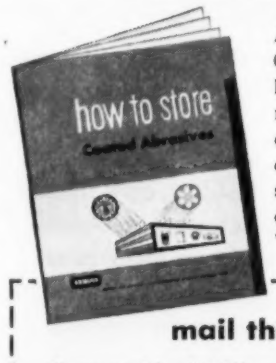
JOHNSON BRONZE CO.,
580 S. Mill St., New Castle, Pa.

JOHNSON BEARINGS
Sleeve-Type

For more details circle **NED-5560** on enclosed inquiry slip

Stop wasting money!

Protect your investment in coated abrasives



A new booklet from Armour's Coated Abrasives Division tells you how to stop losses—in time and money—from improperly stored coated abrasives. Clogging, filling, cracking, loss of grains—these are some of the things proper storage can prevent. Send for free copy of "How to Store Coated Abrasives."

mail this coupon today

Please send booklet "How to Store Coated Abrasives."

Name _____
Company _____
Address _____
City _____ Zone ____ State _____

ARMOUR *Coated Abrasives*

Armour and Company • North Benton Road • Alliance, Ohio

For more details circle **NED-5561** on enclosed inquiry slip

DON'T LOSE VALUABLE DUST!

Buell's wide experience in the recovery of Valuable Dust can help you boost your plant's efficiency now—when peak efficiency is really needed!

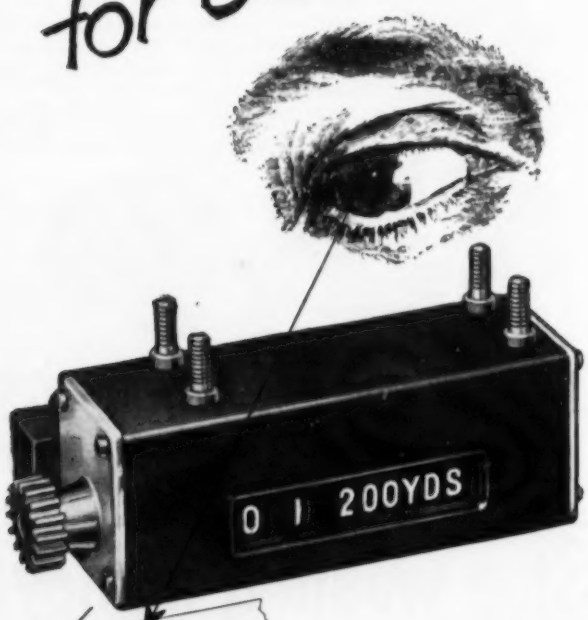
To learn how a Valuable Dust Recovery System can be designed to suit your plant's special requirements, write today for full information on the *3 basic systems* of efficient dust recovery and dust collection. Ask for the new, illustrated Buell 'Dust Recovery' bulletin. Buell Engineering Co., Dept. 23-F, 70 Pine Street, New York 5, New York.

buell

Engineered Efficiency in Dust Collection

▲ For more details circle NED-5562 on enclosed inquiry slip ▲

It has a "Mathematical Eye" for Distance



Added Evidence that—

Everyone Can Count on VEEDER-ROOT

Here's still another good soldier, on a highly special assignment. With contact assembly, it counts miles and yards, when used in conjunction with other equipment. And it also makes contacts on *predetermined* readings . . . *direct* readings that need no translation.

Now, as the counting process comes to be counted as more and more indispensable to all types of defense materiel, what might we do...*especially for you?* Just say when you'd like to get together...*and start figuring.*

VEEDER-ROOT INCORPORATED
HARTFORD 2, CONN.

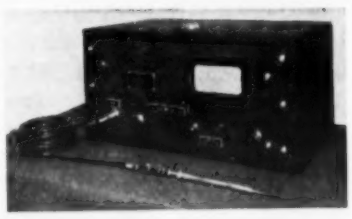
▲ For more details cricle NED-5563 on enclosed inquiry slip ▲

DROP-BOTTOM CONTAINER
can be stacked by fork trucks

Time, labor and worker fatigue can be saved through use of these drop-bottom bulk material handling containers which operate with an easily opened counterweight handle. The drop bottom permits gravity flow to bring parts directly to the operator. Container sides are solid from top to bottom. Units can be stacked to save floor space and for storage use. Handling can be by fork lift trucks or by overhead lifting equipment. Sides are 12-gage, reinforced with 2-in. channels and electric welding. Bottom opening is 13 in. high and 31½ in. wide. Box shown has capacity of ¾ cu yd. Other sizes can be built to specifications. Made by **Roura Iron Works, Inc.**, 1402 Woodland Ave., Detroit 11, Mich.

▲ For more details circle NED-5564 on enclosed inquiry slip ▲

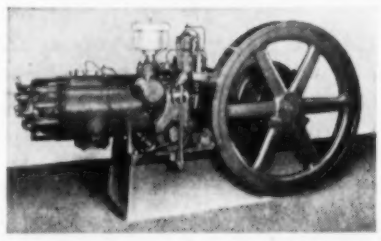
VISCOSITY METER
connects to recorder or controller



Continuous, automatic viscosity measurement using ultrasonics is function of the Ultra-Viscoson viscosimeter used for manufacture and research in petroleum, resins, paper, plastics, textiles, soaps, inks, coatings and finishes. Hermetically sealed probe operates from −109° to 650° F and to 10,000 atmospheres pressure, and is installed in pipe lines, tanks or production kettles, or used in test tubes and beakers. Electronic computer, up to 1 mile from probe, will indicate viscosity of Newtonian materials from 0 to 50,000 centipoises x grams/cc in four decades, 0-50/500/5000/50000. Viscosity of non-Newtonian materials are measured over greater range. Connection to recorder or controller provides continuous charts or automatic control. Made by **Rich-Roth Laboratories,** Dept. U.V.D.-1, 673 Connecticut Blvd., East Hartford 8, Conn.

▲ For more details circle NED-5565 on enclosed inquiry slip ▲

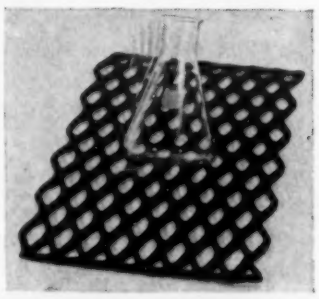
SINGLE-CYLINDER DIESEL
is horizontal two-cycle engine



Horizontal model DA single-cylinder two-cycle diesel engine has 13-in. bore and stroke, and continuous rating of 55 brake horsepower at 325 rpm. Engine features tapered roller bearings for crankshaft and auxiliary shafts and radiator type cooling. Wet sleeve cylinder liner allows easy replacement in field. Engine operates as cold-starting full diesel or converts to burn natural gas or butane. A Pickering governor, Air Maze oil-bath cleaner, McCord lubricator and built-in 7½-hp gasoline starter are standard, while a Twin Disc clutch is optional. Made by **White-Roth Machine Corp.**, Dept. NED, Lorain, O.

▲ For more details circle NED-5566 on enclosed inquiry slip ▲

RESILIENT SINK MAT
prevents breakage to glassware



Breakage of laboratory and pharmaceutical glassware accidentally dropped into sinks can be reduced by lining sinks with Beaker Bouncer mats made of resilient Akrolite. Material is chemically resistant and has firm steel mesh base. Mats will not crack or harden even with constant use. Stock sizes available include 12 x 8 in., 14 x 10 in., 16 x 12 in., 18 x 10 in., 20 x 12 in., 22 x 12 in., 26 x 14 in. and 30 x 15 in. Special sizes are made to order. Distributed by **Meinecke & Co.**, 225 Varick St., New York 14, N. Y.

▲ For more details circle NED-5567 on enclosed inquiry slip ▲

for your file....

NORTHERN'S LATEST BULLETINS

Write to:
NORTHERN
ENGINEERING WORKS
2615 Atwater St., Detroit 7, Mich.

For Bulletins
T-105 AH-103 H-111 HL-115 G-700

NORTHERN CRANES AND HOISTS

▲ For more details circle NED-5568 on enclosed inquiry slip ▲

C.H.F. TRADE MARK **Sectional Tables** WITH SWING SEATS

MAXIMUM SEATING IN ANY SIZE SPACE

For Recreation Rooms . . . Factory Work Tables

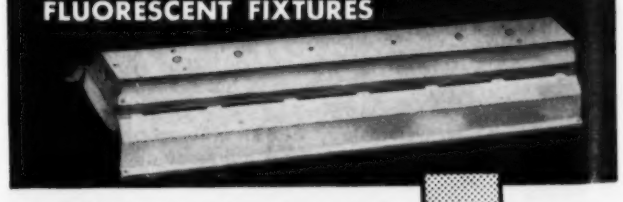
Available in units to seat 4 to 24 people, "CHF" Sectional Tables may be purchased in varying lengths to meet your exact requirements. Seats swing completely under table out of the way to give you full aisle space. Your choice of seats . . with or without backs . . . cast iron frame construction in a variety of colors. "CHF" Sectional tables are standard equipment for schools, factories, clubs, churches and all types of institutions.

WRITE FOR ILLUSTRATED CATALOG AND PRICE LIST!

THE CHICAGO HARDWARE FOUNDRY CO.
"Dependable Since 1897"
1962 Commonwealth Ave. North Chicago, Ill.

▲ For more details circle NED-5569 on enclosed inquiry slip ▲

UP and DOWN LIGHTING for better seeing conditions *Wheeler* DIFFUSER TYPE FLUORESCENT FIXTURES



Get the benefits of greater seeing comfort — reduced brightness contrasts — with the new DIFFUSER TYPE Fluorescent Fixtures — pioneered by Wheeler! Apertures located in the top of the all-white porcelain enameled steel reflector direct approximately 5% of the light upwards . . lessen contrasts . . provide more comfortable seeing and working conditions. Fixtures are available for use with all Slimline and General Line Fluorescent Lamps. Write Wheeler Reflector Company, 275 Congress Street, Boston 10, Massachusetts.

Wheeler REFLECTORS

MADE BY SPECIALISTS IN SEALED LIGHTING EQUIPMENT SINCE 1881

▲ For more details circle NED-5570 on enclosed inquiry slip ▲

WITH A COLUMBIA

TONG TEST AMMETER

There is no other instrument like a Tong Test—it measures both A.C. and D.C. Readings are made instantly and accurately.

These outstanding features are yours when you use a Tong Test Ammeter:

- No breaking of circuit
- Operated with one hand
- Safe and convenient to operate
- Light weight—low price
- Scale ranges up to 1000 Amperes
- Voltage attachment available
- Five types to accommodate cables up to 3⅞", bus bars up to 4½" x ½"

Write for Tong Test Bulletin ND-400

COLUMBIA ELECTRIC MFG. CO.
4525 Hamilton Ave., Cleveland 14, Ohio

▲ For more details circle NED-5571 on enclosed inquiry slip ▲

NEW! HEAVY DUTY

CHELSEA FANS

POWER CHELSEA LINE FANS

—for industrial applications

DIRECT DRIVE OR BELT DRIVE
NON-OVERLOADING PROPELLERS

SOLVE YOUR VENTILATING PROBLEMS

with Chelsea's new heavy duty airfoil type exhaust fans. For use in exhausting, duct work, filter installations, range or vat hoods, penthouse units, paint spray booths, where static pressures are encountered.

WRITE FOR NEW CHELSEA CATALOG No. 400

including detailed information on type, size, specifications, engineering data and installation recommendations. 30 types and over 200 sizes. Please address requests to Dept. Q-6.

FOR FACTORIES, FOUNDRIES, MINES, MILLS
—*totally enclosed ball-bearing motors*

● TYPE PLF POWER LINE DIRECT DRIVE — 16" to 48" in all H.P. ratings. Square frames for easy installation.

● TYPE PLDX POWER LINE DUCT BOOSTER—Motor external to Air Stream, 16" to 48" in all H.P. ratings.

● TYPE PLBD POWER LINE BELT DRIVEN — 24" to 48" in all H.P. ratings. Square frames for easy installation.

● TYPE PLDU POWER LINE AIR BLASTER—For spot cooling — available on pedestal. 18" to 42" in all H.P. rating.

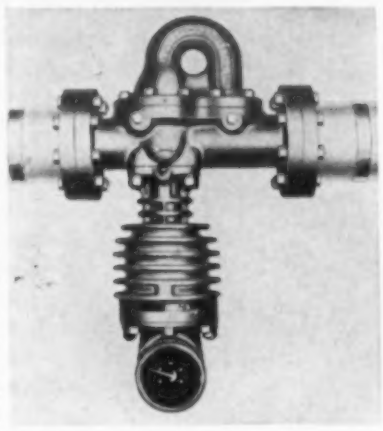
PROPER VENTILATION IS AN INVESTMENT!
Look for this Symbol of Quality . . . →
← Look for this Seal of Certified Ratings

CHELSEA

CHELSEA FAN & BLOWER CO., Inc.
PLAINFIELD, NEW JERSEY

▲ For more details circle NED-5572 on enclosed inquiry slip ▲

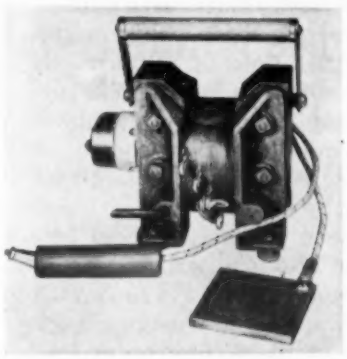
STEAM-AIR-GAS METER
has Meehanite body casting



Redesigned with streamlined damping chamber to create a more uniform cooling system, model SMKS Shuntflo meter for steam, air or gas has an all-Meehanite body casting for strength and durability. Simplified rotor mechanism assures efficient operation, easy parts replacement and longer service. A strengthened rotor shaft can withstand slugs of condensate in the line or sudden line pressure fluctuations. Photo shows front view of meter with single combination cooling and damping chamber. Made by **Builders-Providence, Inc.,** 425 Harris Ave., Providence 1, R. I.

▲ For more details circle NED-5573 on enclosed inquiry slip ▲

ETCHER-DEMAGNETIZER
three models available



Clean and rapid marking of all steel parts, including hardened, thin and delicate pieces, can be performed with Red Head metal etcher. Since close fitting and sliding parts, cutters and tools are often damaged or dulled by minute particles or chips adhering to them because of magnetism, a companion demagnetizing unit can be added to the etcher. Two units can be purchased individually or as a combination. Three models are available: Junior for light work, Senior with twice the demagnetizing power of the Junior model, and a heavy duty model. Made by **Mundro Products Corp.,** Dept. NE, P. O. Box 3911, Detroit 27, Mich.

▲ For more details circle NED-5574 on enclosed inquiry slip ▲

PORTABLE FIRE FIGHTER
discharges fog at 600 psi pressure

Designed for in-plant fire protection, portable model FMC 203-FTT Fire Fighter can, in matter of seconds, discharge smothering fog at 600 psi pressure. Trigger-type fog gun is adjustable from shut-off to solid stream and through varying degrees of fog. Discharge rate is low because penetrating, smothering fog does the job, not water volume. Pumping unit adjusts to discharge 150-gal tank at 5 gal per minute. It is detachable, mounted on individual frame and fitted with handles for manual movement. Suction hose can draw water from any sump, barrel, tank or other water supply. Made by **Food Machinery & Chemical Corp.,** John Bean Div., Coleman & Newhall Sts., San Jose 1, Calif.

▲ For more details circle NED-5575 on enclosed inquiry slip ▲

TOWEL DISPENSING CABINET
reduces paper towel consumption

Designed with a "control" that discourages waste of towels, this towel dispensing cabinet is said to reduce consumption up to 50 per cent. Pushbutton control cabinet is easy to operate and uses pure sulphate Mosinee Turn-Towels, available in roll form. Single towel is dispensed by pushing a button in front and turning small crank at the side of the cabinet. Dispensing mechanism is removable as a unit without taking cabinet from the wall and can be replaced by a complete new unit. Available from **Bay West Paper Co.,** Green Bay, Wis.

▲ For more details circle NED-5576 on enclosed inquiry slip ▲

QUICK and EFFICIENT in ACTION

Truscon Steel Boxes and Skids *keep things moving!* They are available in a wide variety of styles and sizes, for truck, crane or hand-operated carrying units.

Truscon Steel Boxes and Skid Platforms are strong at all parts where strength is needed. Units are designed to meet the particular requirements of each individual job. There is practically no maintenance or up-keep required.

Truscon engineers offer to study the handling conditions in your plant and make recommendations without any obligation on your part. This service has been rendered to many manufacturers. Savings have, in many instances, more than offset the original cost of the equipment within a few months. Write for literature.

TRUSCON® STEEL COMPANY • Pressed Steel Division
6206 Truscon Avenue, Cleveland 4, Ohio • Subsidiary of Republic Steel Corporation

▲ For more details circle NED-5577 on enclosed inquiry slip ▲

SINGLE-ACTING Air-Clamp*

*Pneumatic Cylinders

Bore	STROKES Horizontal	Vertical
1"	⅝"	⅝"
2¼"	1"-2"-3"	1"-2"
3"		½"-2"
4"	2"-2½"	2"
5"	3"	3"
6"	3"	2"

NEW CATALOG READY! Complete line of simple adaptable, compact spring-return air cylinders. Cut costs and speed up production the modern, Air Power way. Write today.

MEAD SPECIALTIES COMPANY
4114 No. Knox Ave., Dept. N-62-A, Chicago 41, Ill.

▲ For more details circle NED-5578 on enclosed inquiry slip ▲

What do you do when you don't have the right size v-belt in stock?

1. **Contact your supplier for a replacement . . .** wait for delivery and watch production stay at zero.
2. **Send someone to get the required belt . . .** pay your employee while he goes for the belt and pay through loss of production.
3. **Stock VEELOS** . . . and always have the right size v-belt when you need it because *any length* can be made up from a 100-foot reel. Inventory is automatically maintained. Available from distributors.

Get the facts on Veelos—the v-belt that keeps production up and holds inventory costs down—write for your VEELOS DATA BOOK which includes construction, installation and use details.

VEELOS THE LINK V-BELT

MANHEIM MANUFACTURING & BELTING CO.
650 Manbel Street, Manheim, Pa.

Adjustable to Any Length • Adaptable to Any Drive

▲ For more details circle NED-5579 on enclosed inquiry slip ▲

FEDERAL PRESSES

27 YEARS OF QUALITY CONSTRUCTION

Smoother, Faster

More Accurate Operation

Federal Presses with new Smooth-Air clutch are controlled electro-pneumatically. Void of mechanical linkage. May be "inched", single-tripped, or operated continuously. Built of finest materials, working parts are carefully machined, fitted and aligned for balanced power at any operating speed. 6 to 80 tons. Write for catalog.

THE FEDERAL PRESS CO.
506 Division St., Elkhart, Ind.

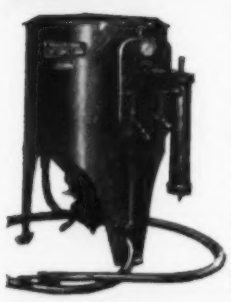
▲ For more details circle **NED-5580** on enclosed inquiry slip ▲

Here's how Pangborn

Solves these Problems

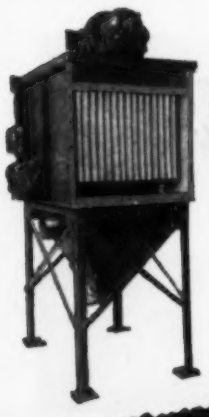
with this modern equipment

BLAST CLEANING!



Blast Cleaning Cabinet quickly and easily cleans metal parts of rust, grime, dirt, paint, etc. Produces a clean, smooth surface on pieces up to 60" x 36". Models available from $319.00 and up.

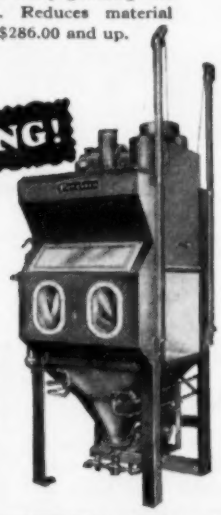
Blast Cleaning Machine not only removes rust, dirt, scale, etc., but is ideal for maintenance and many other uses. Cleans large objects such as bridges, structural work, tanks before painting. Six sizes, portable or stationary, from $170.00 and up.



DUST COLLECTING!

Unit Dust Collector stops dust at its source, minimizes machine wear and tear, reduces housekeeping and general maintenance costs. Solves many grinding and polishing nuisances. Reduces material losses. Models from $286.00 and up.

PRECISION FINISHING!



Hydro-Finish Cabinet uses liquid blast, eliminating dust, and reduces costly hand polishing, cleaning and finishing of molds, dies, tools, etc. Removes scale, discoloration and directional grinding lines, prepares surfaces for plating and coating. Holds tolerances to .0001". Models from $1410.00 and up.

LOOK TO PANGBORN FOR THE LATEST DEVELOPMENTS IN BLAST CLEANING AND DUST CONTROL EQUIPMENT

Pangborn

MAIL COUPON for full details

(Check for more information)
- ☐ Blast Cleaning Cabinets
- ☐ Blast Cleaning Machines
- ☐ Unit Dust Collectors
- ☐ Hydro-Finish Cabinets

PANGBORN CORP., 2400 Pangborn Blvd., Hagerstown, Md.

Gentlemen: Please send me more information on the equipment I've checked at the left.

Name .....

Company .....

Address .....

City ..... Zone .... State .....

▲ For more details circle **NED-5581** on enclosed inquiry slip ▲

PACKAGED WATER SYSTEM
complete with 12-gallon tank

Designed for small demand applications, the Rapidayton Gusher packaged water system has an automatically welded 12-gallon capacity horizontal galvanized tank. This shallow well system has a reciprocating type pump with automatic pressure switch. Standard ¼-hp motor has a thermal overload protector. All working parts are readily accessible and suction and discharge valve can be easily removed for cleaning and inspection. Made by **Dayton Pump & Mfg. Co.,** Dept. NED, 500 N. Webster St., Dayton, O.

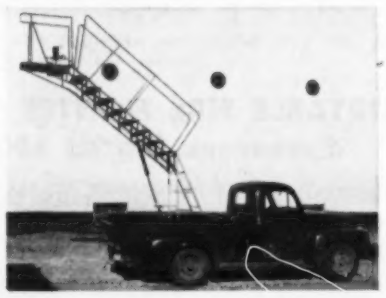
▲ For more details circle **NED-5582** on enclosed inquiry slip ▲

VINYL PRIMER
for rusted steel surfaces

Damp or dry rusted steel surfaces can be primed successfully with Tygorust vinyl primer, even without wire brushing, for overcoating with vinyl, nitrocellulose, alkyd and oil-based finishes. Primer can be applied by brushing, spraying or dipping, and surface is ready for overcoating in matter of minutes. For maximum results, however, surface should be free of grease, oil, and loose scale. Despite fact that primer is fast drying, it can be applied to old, oxidized paint films, except bituminous coatings, without lifting or bleeding. Results of 120-hour salt spray test on surface primed with Tygorust and finished with Tygon paint showed no evidence of rust creepage along scorings. Developed by **U. S. Stoneware Co.,** P. O. Box 350-B, Akron, O.

▲ For more details circle **NED-5583** on enclosed inquiry slip ▲

ELEVATING WORK STAND
mounts on truck bed or tractor frame



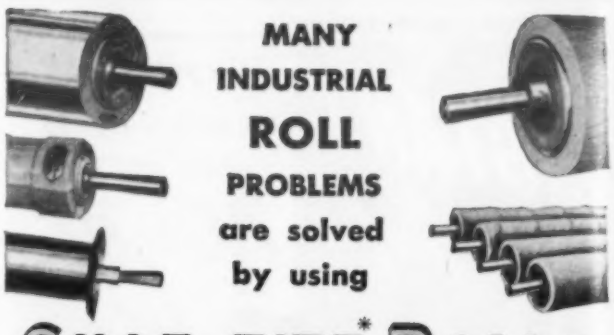
Any job that requires workman to be located at any point up to 14 ft high is simplified with this portable work stand designed for mounting on either truck bed or tractor frame. Device has proved practical for maintenance, assembly, painting and other work. Stand is easily raised and lowered from the platform by means of hydraulic pump and ram combination. The 2 x 3-ft platform and steps automatically remain parallel and level in any position. Either 6 or 8-ft side arms which allow 11 ft and 14 ft elevation, respectively, are available. Made by **Mayrath Machinery Co.,** Dept. 2411, E. Trail St., Dodge City, Kans.

▲ For more details circle **NED-5584** on enclosed inquiry slip ▲

TOP-FIRED CRUCIBLE FURNACES
in single or twin-furnace units

Reported fuel savings of up to 25 to 30 per cent on aluminum and up to 50 per cent on brass and copper are afforded by line of Markley oil or gas top-fired crucible furnaces available in sizes from No. 50 to 400. Combined radiant and convection heating principles provide fast heating. Furnaces are easy to charge since there is little flame coming through covers. Holes in cover permit easy inspection of burners, and burners themselves will not plug since they are above cover where slag or metal cannot reach them. In addition to standard sizes made in both stationary and tilting types, furnaces are also built in single top-fired units for large crucibles. Made by **Morrison Industries, Inc.,** 17698 Broadway, Bedford, O.

▲ For more details circle **NED-5585** on enclosed inquiry slip ▲



MANY INDUSTRIAL ROLL PROBLEMS are solved by using

SHAF-TITE* ROLLS

Minimum sizes 3" diameter and 3' face length

Many patented constructions provide strongest possible shaft setting. Your choice of many different types and materials—wood, rubber, iron, brass, stainless steel, plastic, etc. Whatever your roll problem, put it up to Rodney Hunt.

SEND FOR NEW CATALOG NO. 48

Most complete publication of its kind

Industrial Roll Division

RODNEY HUNT MACHINE CO.

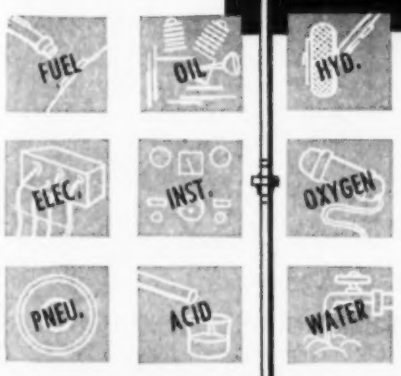
73 Maple Street, Orange, Mass.

*Reg. U.S. Pat. Off.

▲ For more details circle **NED-5586** on enclosed inquiry slip ▲

throw your wrench away

CONNECT or DISCONNECT *any* fluid or electric line *without* a wrench



Join or separate any line with your fingers. You do it in *seconds* instead of minutes, when you use leakproof *WIGGINS* Inst-O-Matic couplings. We design to meet your requirements.

SUBMIT YOUR PROBLEM. WIGGINS Inst-O-Matic couplings can reduce your costs. Write today. There's a qualified representative near you.

Wiggins

Aircraft Division
E. B. WIGGINS OIL TOOL CO. Inc.
3424 E. Olympic Blvd., Los Angeles 23

INST-O-MATIC COUPLINGS

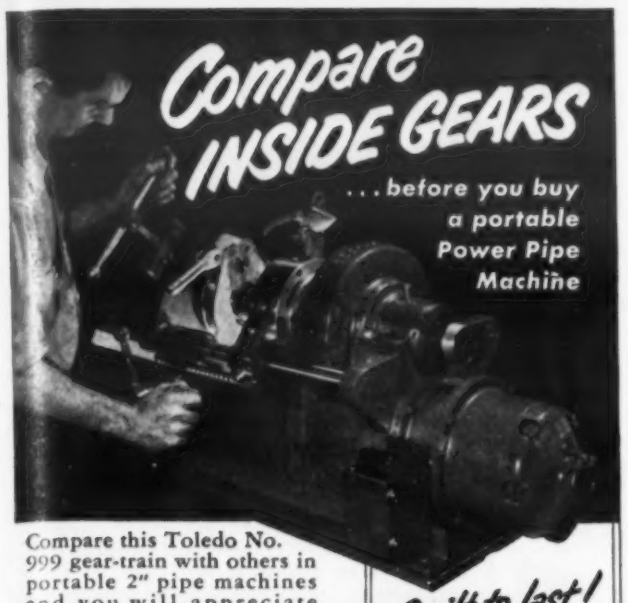
▲ For more details circle **NED-5587** on enclosed inquiry slip ▲

JEFFREY

ESTABLISHED 1877

THE JEFFREY MANUFACTURING CO.
952 Fourth St., Columbus 16, Ohio

▲ For more details circle **NED-5588** on enclosed inquiry slip ▲

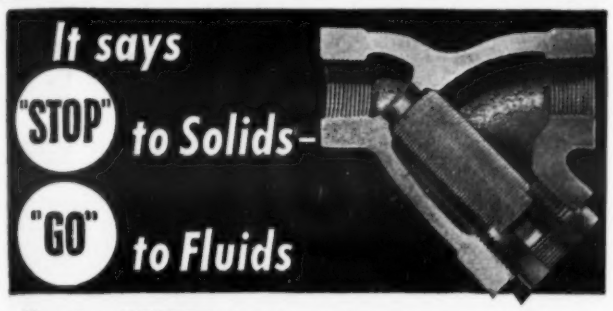


Compare this Toledo No. 999 gear-train with others in portable 2" pipe machines and you will appreciate Toledo's superiority! It's *your* money you are spending. Get Toledo value! Wheel or knife cut-off. High production, dependable...ask your distributor. The Toledo Pipe Threading Machine Co., Toledo, Ohio.

TOLEDO

PIPE TOOLS . . . POWER PIPE MACHINES

▲ For more details circle **NED-5589** on enclosed inquiry slip ▲



Here is a BETTER Strainer to "police your pipelines"

- **FIRST**—*The Screen*, a high-grade, woven Monel wire basket that catches solids—lets condensate, oil or other fluids flow freely.
- **SECOND**—*Finish*. Cadmium plated for protection against corrosion and for better appearance.
- **THIRD**—*Easily Cleaned*. Blow-off bushing made for easy removal. Bushing and Screen come out together. Screen automatically aligns on reassembly.
- **THOUSANDS IN SERVICE**—Sold by over 150 Mill Supply Houses. 6 sizes from ½" to 2" for pressures up to 600 lb. Reasonably priced.

See your supply house or write for Bulletin S-201.

YARNALL-WARING COMPANY
131 Mermaid Ave., PHILADELPHIA 18, PA.

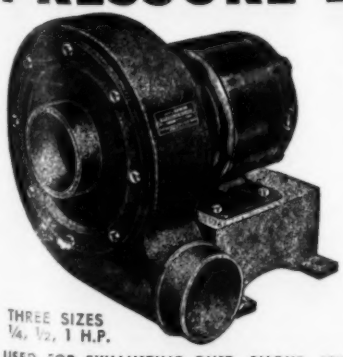
YARWAY STRAINERS

▲ For more details circle **NED-5590** on enclosed inquiry slip ▲

The Famous Sutton

MOTOR DRIVEN

PRESSURE BLOWER



ORDERED BY EVERY BIG NAME IN THE COUNTRY!

THREE SIZES
¼, ½, 1 H.P.

USED FOR EXHAUSTING DUST, SMOKE, FUMES, VAPOR . . COOLING AND DRYING . . CONVEYING COTTON, WOOL, SHAVINGS . . FORGE BLASTING

MADE OF LIGHTWEIGHT CAST ALUMINUM ALLOY to reduce weight and increase strength. CENTRIFUGAL TYPE. Delivers even, nonpulsating flow of air. Universal as to rotation and discharge. Direction of discharge may be changed to any of eight 45 degree positions. Straight wall construction reduces windage and increases efficiency. Standard 3450 r.p.m. direct-connected 60-cycle ball bearing motor, open or totally enclosed types. Capacities, 100 to 800 cu. ft. per min. at static pressures from ½" to 6".

WRITE FOR LITERATURE AND PRICES

Sutton Manufacturing Corp.

126 WEST WILSON AVE. NORFOLK, VA.

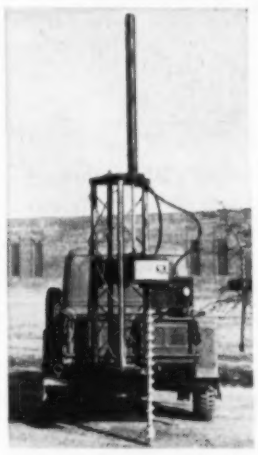
▲ For more details circle **NED-5591** on enclosed inquiry slip ▲

PRECISION HEIGHT GAGE
made in 20, 30 and 40 in. sizes

Movable differential scale system for measuring and marking at any point up or down is incorporated in Universal precision height gage which is made in 20, 30 and 40-in. sizes. Graduations on right give absolute measurement from measuring surface plate, while graduations on left run downward in series of 5 in. If it is desired to measure from certain height, scriber attached to vernier scale is used. Main scale can be moved up in upright beam by means of screw adjustment to coincide at any convenient decimal with vernier. In this manner, it is possible to measure from any given point up or down without having to figure differentials. Long square scriber can be pushed out to measure 8 in. beyond height gage base on the 20-in. instrument. Base serves as platform when attaching dial indicator so that gage can serve as combination platform dial gage. Made by **Brand Tool Co.**, 907 S. Victory Blvd., Burbank, Calif.

▲ For more details circle **NED-5592** on enclosed inquiry slip ▲

COMBINATION DRILL RIG
mounts on Jeep or truck and is driven by vehicle's power takeoff



Rotary, auger and percussion drilling can all be done on the B-36 combination drill rig which has hydraulic feed of approximately 8000 lb pressure. Tubular drill mast nests in the members of the drill carriage, also of tubular construction, for cross-country travel with overall height of 10 ft. Mast telescopes together with feed cylinder hydraulically to operating height of 16 ft. Rig mounts on Willys Jeep or any truck with power takeoff and can be furnished with auxiliary cat head, sand reel and high pressure water pump.

Maximum depth for auger drilling without water is 150 ft, for rotary drilling with water, over 300 ft. Either 3 or 5-ft augers with 3 to 10-in. diameters, or drill stems in 10-ft sections are handled by drill. Hydraulic stabilizers take pressures off tires while drill is in use. Variable speed controls at rear of truck allow utilization of full power of vehicle engine in drilling. Made by **Mobile Drilling, Inc.**, 960-A N. Pennsylvania St., Indianapolis, Ind.

▲ For more details circle **NED-5593** on enclosed inquiry slip ▲

Towsley

INDUSTRIAL FLOOR TRUCKS

for Every Materials Handling Purpose

No. 421. The "50 Line" for department, food stores, supply houses, hotels.

No. 480. "Selector Truck" may be equipped with variety of upper trays, shelves for special application.

No. 509. All steel "All-Welded" general purpose, push handle both ends, adjustable shelves.

No. 791. Side dump with automatic couplers fore and aft for pulling in train.

No. 384. The "200 Line" level top general purpose truck — "All-Welded" steel frame—pipe push handles.

There's an economy-wise, manpower-wise way . . . with Towsley Trucks! If you have a specific handling problem requiring special purpose equipment, let "Towsley give you a lift." For details write for Bulletin No. 50.

No. 786. Trailer type box truck with running gear mounted for perfect trailing.

TOWSLEY TRUCKS, INC., 1776 Elmore St., Cincinnati 23, O

▲ For more details circle **NED-5594** on enclosed inquiry slip ▲

TYPE H MIXER for Concealed Piping. Dial diam. 6". Mixer for exposed piping has 3¼" dial.

SAFEST SHOWER MIXER MADE

ONLY ONE MOVING PART

POWERS

Thermostatic **SHOWER MIXERS**

are SAFE against scalding caused by

1 PRESSURE or 2 TEMPERATURE

fluctuations in water supply lines

Shower temperature remains constant wherever set. They're modern, really safe and non-scald. For new installations or when modernizing obsolete showers use POWERS mixers. Get Circular H48. 2720 Greenview Avenue, Chicago 14, Illinois.

THE POWERS REGULATOR CO.

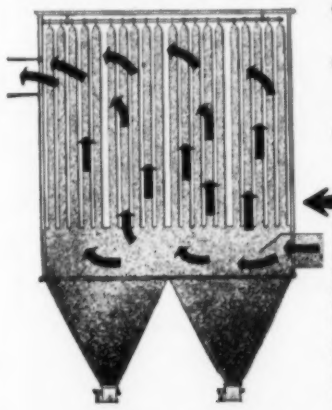
▲ For more details circle **NED-5595** on enclosed inquiry slip ▲

IT'S NEW!

PANGBORN
Cloth Bag Collector

for high-efficiency, low-cost dust collection!

This new Pangborn "CM" Cloth Bag Dust Collector extends the high-efficiency collection characteristics of the cloth filter to applications previously considered too costly. The Pangborn "CM" Collector is well adapted for collecting carbon black, graphite, pigments, soap, food dusts, metal oxides, and other dusts of similar characteristics. For further information, write for Bulletin 914 to: PANGBORN CORP., 2400 Pangborn Blvd., Hagerstown, Md.



- *Adaptable to wide variety of industrial dust problems due to new bag design*
- *Individual bags can be inspected, removed, and replaced without tools and without disturbing other bags*
- *Built for trouble-free service through simplified design and use of fewer parts*

Here's how it works:

Dust-laden air enters from the piping system. Coarse materials precipitate directly to the hoppers below the bags. Air containing finer dust particles flows into the bags, where the dust is filtered on the inner surface of the bags. Cleaned air is then discharged from the collector.

Look to Pangborn for the latest developments in Dust Control and Blast Cleaning equipment

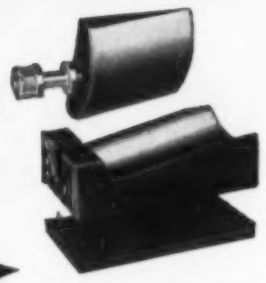
Pangborn DUST CONTROL

STOPS THE DUST HOG from stealing profits

▲ For more details circle **NED-5596** on enclosed inquiry slip ▲

NEW Empco JACK Gives you Quick Accurate Machine Leveling and it ABSORBS VIBRATION

New type JACK greatly reduces noise and vibration with VI-SORB Mounting Pads.



VI-SORB Mounting Pads

The combination of a new Empco Jack and VI-SORB is a long step forward in setting and keeping power-driven equipment level while combating the destructive forces of vibration.

Empco Jacks are self-aligning to give you the quickest, easiest, most accurate machine leveling ever known.

For precise machine leveling and maintenance you will save time and money if you use Empco Jacks with VI-SORB Mounting Pads. Write for complete information and prices today!

Remember: A level machine—kept on the level—does better work and lasts longer.

EMPCO PRODUCTS

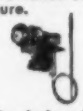
THE ENTERPRISE MACHINE PARTS CORPORATION
2727 JEROME AVENUE • DETROIT 12, MICHIGAN

For more details circle NED-5597 on enclosed inquiry slip

ATTENTION!

Special airborne pressure switch for operation between sea level and 50,000 feet.

Unique multiple thermal assembly to safe-guard bearings on a conveyor system by constant surveillance of lube oil temperature.



Originally designed thermostat for heat sealing plastic material used in automatic packaging machine.

Newly developed programming thermostat for precise cyclic control of heat treating oil bath.

Low cost, dependable, accurate thermostat for oxygen tent interior temperature control.

YOUR PRODUCTS ARE BETTER WHEN SPECIFICALLY DESIGNED CONTROLS ARE USED

The controls shown were designed especially to improve product performance and thus increase product quality and sales appeal. They were developed by United Electric engineers in cooperation with the manufacturers concerned. United Electric is continually solving unusual control problems within the limits of 30" mercury vacuum to 3000 psi and -150° F to 700° F for inclusion as original equipment by manufacturers of a wide variety of products. Whether you are building 5, 5000 or more units, United would like to help you. Send complete details of your problem today.

UNITED ELECTRIC CONTROLS COMPANY
84 School Street, Watertown, Mass.

STANDARD & SPECIAL THERMOSTATS & PRESSURE SWITCHES

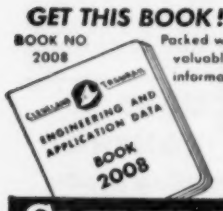
For more details circle NED-5598 on enclosed inquiry slip

20 FOOT BARS
Stored and Handled Efficiently

Simple, inexpensive overhead tramrail cranes make it easy to handle long, unwieldy bars and store them in racks where readily found. One man can easily and quickly place a heavy bar into or take out of storage and deliver to any point covered by the crane.

Wherever materials are moved Cleveland Tramrail offers possibilities of tremendous savings.

GET THIS BOOK!
BOOK NO 2008 Packed with valuable information

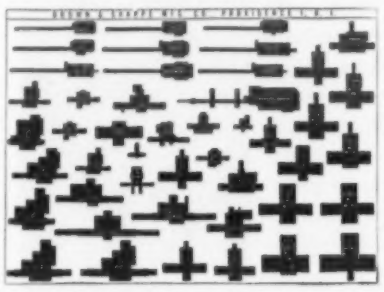


CLEVELAND TRAMRAIL DIVISION
THE CLEVELAND CRANE & ENGINEERING CO.
6621 East 285th Street, Wickliffe, Ohio

CLEVELAND TRAMRAIL

For more details circle NED-5599 on enclosed inquiry slip

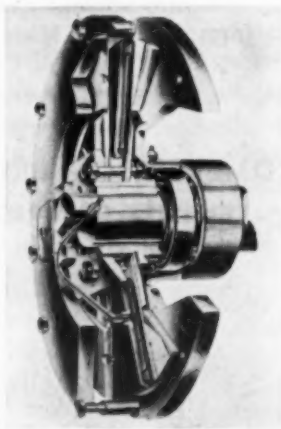
PLANT LAYOUT TEMPLETS
kit contains 5000 scaled items



Five thousand ¼-in. scale Repro-Templets of the most-used machine tools and shop equipment made by 160 manufacturers are contained in this alphabetically indexed master planning file for plant engineers. File is produced on 12 x 18-in. film sheets. Any commercial method can be used to quickly reproduce any quantity of individual templets or groups of templets needed to lay out almost any metalworking plant. File is shipped on a priority order basis and has price of $650. Made by **Repro-Templets Inc.**, Dept. NED, Oakmont, Pa.

For more details circle NED-5600 on enclosed inquiry slip

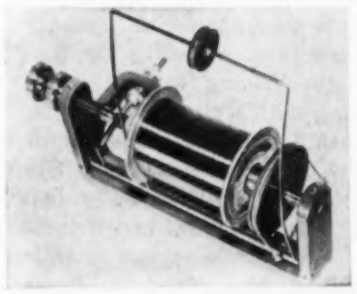
AIR FRICTION CLUTCH
for heavy duty applications



Built with no wearing moving parts and requiring no adjustment, Flex-Disc air friction clutch for heavy duty clutch applications is offered in single and multiple tube and plate design. It incorporates air-cooling, compact alloy steel construction for light weight and minimum shaft space and is unaffected by oil or water. Clutch is made in range of capacities and sizes to fit various applications. Air friction brakes of same general design, either spring-engaged and air-released, or air-engaged and spring-released, are also available. Made by **Cardwell Mfg. Co.**, Clutch Div., 810 S. Wichita St., Wichita, Kans.

For more details circle NED-5601 on enclosed inquiry slip

WIRE TENSIONER
handles extremely fine wires



Alloy resistance wires as fine as 0.0007-in. and fine copper wire ranging from No. 35 to 47 on spools with up to 2½-in. diameters can be handled by model T-101 revolving spool tensioner. Friction is minimized by spool-handling shaft revolving between two hardened centers, and wire snagging is avoided by taking wire straight off spool by means of wire guide traveling length of spool. Tension is regulated by thumb nut adjustable drag brake. Coil winders which can use tensioner are models 112, 112-A, 115, 115-A, 130, 131, 135. Made by **Geo. Stevens Mfg. Co.**, 6024 N. Rogers Ave., Chicago 30, Ill.

For more details circle NED-5602 on enclosed inquiry slip

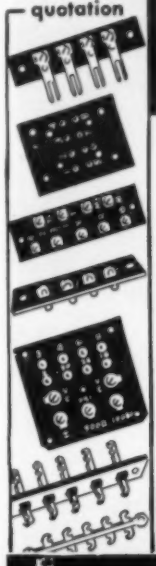
TELEPHONE DICTATION SYSTEM
uses single recording unit

Each user of Phon-Audograph remote control telephone dictation system has a private line connected with the single recording machine. User has complete control of the system, including lockout of controls on all other telephones. Unit incorporates pushbutton control for unlimited listen-back, control for indicating corrections or special instructions and private telephone line between dictator and secretary. Lights on all telephones glow when system is available for use. To dictate, user presses the fingertip control button on the handset and talks. Touch of "listen" button plays back last sentance or two. Both attendant and dictator are warned of approaching end of recording disk. Made by **Gray Mfg. Co.**, Arbor St., Hartford, Conn.

For more details circle NED-5603 on enclosed inquiry slip

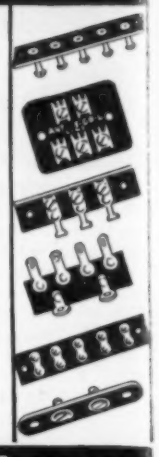
Send your specifications for prompt quotation

Hundreds of standard
JONES TERMINAL PANELS
Complete Equipment FOR SPECIALS



Several pages of Jones Catalog No. 16 illustrate standard and special panels we are constantly producing. Latest special equipment enables us promptly to produce practically any panel required. Send print or description for prices, without obligation. Hundreds of standard terminal strips also listed. Send for Catalog, with engineering drawings and data.

JONES MEANS *Proven* QUALITY



Jones

HOWARD B. JONES DIVISION
CINCH MANUFACTURING CORPORATION
CHICAGO 24, ILLINOIS
SUBSIDIARY OF UNITED-CARR FASTENER CORP.

For more details circle NED-5604 on enclosed inquiry slip

NEW!

THE
COPYFLEX "30"

High Speed—Low Price—Premium Prints

Here, for the first time, is a copying machine—Bruning's Model "30" COPYFLEX—that combines such a *high speed* with such a *low price* and such *premium quality*, ready-to-use prints.

The "30" is ideal for the drafting room or office with medium volume requirements and a moderate budget. It handles cut sheets or roll stock up to 42 inches wide, and offers features ordinarily found only in larger, more expensive machines.

With the "30" and the unsurpassed line of sensitized COPYFLEX papers, cloths and films, you can always get exactly the kind of premium quality prints you want, when you want them.

See how COPYFLEX "30" can save your time, cut your costs. Write for Booklet A-2030 to CHARLES BRUNING CO., INC., Dept. C62 Teterboro, N. J.

BRUNING
Specialists in copying since 1897

For more details circle NED-5605 on enclosed inquiry slip

New Shadograph Precision Units to Select and Classify Rotating Parts . . . .

If you are selecting and classifying high-speed rotating parts such as buckets used in gas turbines for jet plane engines investigate the new Shadograph models expressly built for solving this problem. Two models are now available (1) Model #4112-A (illustrated), a special laboratory balance using a calibrated variable counterweight (2) Model #4102-B (not shown), a production model, with counterweights, beam and dial calibrated directly in moment weight units. For complete details covering these new essential production tools write the address below.

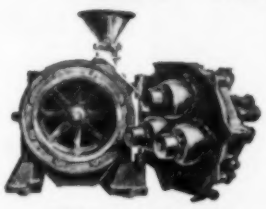
EXACT WEIGHT SCALES

Industrial Precision

THE EXACT WEIGHT SCALE COMPANY
930 W. Fifth Avenue, Columbus 8, Ohio
2920 Bloor St., W., Toronto 18, Canada

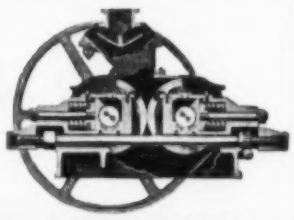
For more details circle **NED-5606** on enclosed inquiry slip

STURTEVANT EQUIPMENT INCREASES PRODUCTION AND CUTS COSTS



RING-ROLL MILLS
for medium and fine reduction 10 to 200 mesh, hard or soft materials. Very durable, small power. Operate in closed circuit with Screen or Air Separator. Open door accessibility. Many sizes. No scrapers, plows, or pushers.

ROTARY FINE CRUSHERS
for intermediate and fine reduction down to ¼". Open door accessibility. Soft or moderately hard materials. Efficient granulators. Excellent preliminary Crushers preceding Pulverizers.



CRUSHING ROLLS
for granulation, coarse or fine, hard or soft materials. Automatic adjustments. Crushing shocks balanced. For dry or wet reduction. Sizes 8x5 to 38x20. The standard for abrasives.

MOTO-VIBRO SCREENS
screen anything screenable. Classified vibrations. Unit construction — any capacity. Open door accessibility. Open and closed models with or without feeders. Many types and sizes — range of work ½ inch to 60 mesh.

Sturtevant Mill Company, 114 Clayton St., Boston 22, Mass.

For more details circle **NED-5607** on enclosed inquiry slip

You asked for It . . . Now It's here!
Clarin's New History Making TABLET ARM CHAIR
with the Arm that FOLDS

The Answer to a Multitude of Auxiliary Seating Problems

The Most Convenient Seating For . . .
SALES CONFERENCES
DEPARTMENTAL MEETINGS
GROUP DISCUSSIONS
LECTURES
TAKING MINUTES, NOTES, DICTATION, etc.

The Arm is an integral part of the chair, and folds flat against the seat.

A compact, durable, comfortable folding chair of wide utility that we are proud to be the first to offer.

No. 2317W-TA
Doubly Reinforced Steel Frame with Plywood Seat and Wood Arm.
Folds Flat to 3 inches
Patents Pending

- Available with Seat only, or Seat and Back Upholstered in Leatherette.
- Patented Rubber Feet prevent noise and marring.

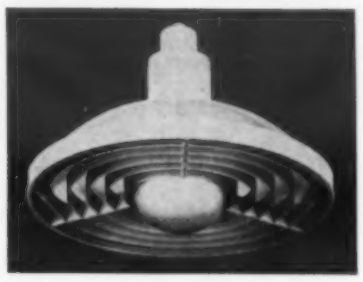
Write today for Folder, Prices and Delivery.

CLARIN MFG. COMPANY
4640 W. Harrison St. • Dept. 15
CHICAGO 44, ILLINOIS

SINCE Clarin FOLDING CHAIRS 1925

For more details circle **NED-5608** on enclosed inquiry slip

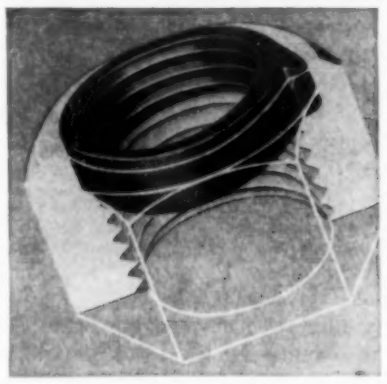
SPOT & FLOODLIGHT ADAPTER fits porcelain ceiling receptacles



This portable spot or floodlight fixture, designed for use in any porcelain ceiling receptacle, consists of steel housing, porcelain adapter receptacle, aluminum reflector and concentric louver. It is equipped with a swiveling device and can also be used with portable base, clamp-on, screw-in, or box plate swiveling adapter fittings. It makes use of frosted bowl spot type bulb for recessed or surface mounted beamed downlighting and silvered-end spot bulb for pin-point lighting. Light source is completely shielded and reflector has 45-degree shielding. Made by **Silvray Lighting, Inc.,** 106 W. Main St., Bound Brook, N. J.

For more details circle **NED-5609** on enclosed inquiry slip

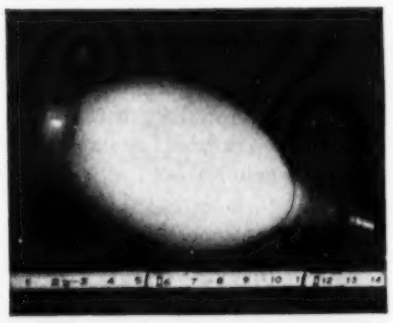
LOCKNUT has improved retainer ring



Change in heat treating has made possible improvements in elliptical retainer ring, an integral part of this locknut, thus assuring a better lock when it is wrenched into position. Automatic locking of the nut on the bolt does not require bolt tension, as it stays put exactly where it is positioned by wrenching, even with violent vibration. Retainer portion of the assembly is automatically isolated from bearing contact with the nut and functions solely as a lock. An ear on the retainer ring fits in a cavity in the nut body to prevent rotation within the nut. Fastener can be removed and reapplied many times without losing its locking power or damaging bolt threads. Made by **Security Locknut Corp.,** 1500 North Ave., Melrose Park, Ill.

For more details circle **NED-5610** on enclosed inquiry slip

FLUORESCENT MERCURY LAMP emits golden white light



Suitable for all types of lighting service except those where close color discrimination is involved, 1000-w C-H12 fluorescent mercury lamp provides a golden white light. Ballast is the same as that used for the 1000-w A-H12 lamp. The bulb has an isothermal shape that allows phospher coating to function at maximum efficiency. Inside frosting provides better diffusion of light and greater uniformity of color. When used outdoors, fixtures should protect the bulb from driving rain and moisture-laden insects. Bulb is 7-in. diameter at center and is rated at 4000 hours life at 5 or more burning hours per start. It will burn in any position. Made by **Westinghouse Electric Corp.,** Lamp Div., Bloomfield, N. J.

For more details circle **NED-5611** on enclosed inquiry slip

VACUUM PUMP SEAL BEARING serves as bearing and seal support

Individually designed, cast machined and finished two-purpose bearing not only supports a shaft and serves as a bearing, but also acts as seal support for vacuum pumps. Metal used is high lead tin bronze (bearing bronze) and has medium tensile strength and good bearing qualities. Metal is similar to SAE 660, ASTM B30-45T No. 3B and ASTM B144-64T No. 3B. Made by **Bronze Bearings Inc.,** 586 North Ave. E., Cranford, N. J.

For more details circle **NED-5612** on enclosed inquiry slip

this new WELDING DESIGN MANUAL

FREE!
FOR THE ASKING

To assist you in your re-tooling problems . . . or to help you analyze your present welding methods so that you may enjoy maximum speed, efficiency, and economy in many of YOUR production problems...

Giant new 4th Edition contains 62 new photographs, 132 new drawings, 72 pages of helpful data covering basic and advanced welding techniques and designs used in fabricating and assembly. Profusely illustrated with application drawings; weld diagrams; tables of melting temperatures, strengths, corrosion factors; charts; alloy recommendations; etc. Convenient digest size.

This just-off-the-press book is "must" reading for anyone engaged in defense production and design, and will certainly be time profitably spent for any production man.

SEE . . . The unbelievable savings in metal-joining which can now be yours through the use of "Low Temperature Welding Alloys"® discovered a few years ago and now used in over 75,000 industrial plants throughout America for more efficient metal-working production as well as for salvaging irreplaceable tool and machine parts.

Over 100 different, new, EUTECTIC Low Temperature WELDING ALLOYS® and EUTECTOR® Fluxes are job-engineered for use on ALL metals—cast iron, alloy steels, aluminum, copper and nickel alloys, die castings, overlays, etc., and may be applied with ALL heating methods—torch, arc, furnace, induction heating, etc.

SEND FOR YOUR COPY TODAY!

EUTECTIC WELDING ALLOYS CORPORATION
172nd Street at Northern Boulevard • Flushing, New York, N. Y.

For more details circle **NED-5613** on enclosed inquiry slip

ED MEEKA,
Superintendent,
ROBINSON BRICK & TILE CO.,
Denver, Colorado

Mr. Meeka explains . . .

"We have a crusher driven by a 40 h.p. 250 volt motor. The starting load on this motor is often quite heavy and gave us no end of trouble by causing the 400 ampere fuses protecting the circuit to blow.

"Some months ago, after checking the actual running current of the motor with an ammeter, we decided to see if FUSETRON dual-element Fuses could live up to their claims.

"The ammeter reading indicated that 125 ampere FUSETRON Fuses should be used to give motor-running protection. So we installed this size.

"Were we surprised — they not only hold the starting current of the crusher motor — but we have the satisfaction of knowing the motor also has burnout protection to back up the overload relays in case they should ever fail.

"Not once since we installed FUSETRON Fuses have we lost a moment's production due to a fuse blowing needlessly."

Why Risk Losses?

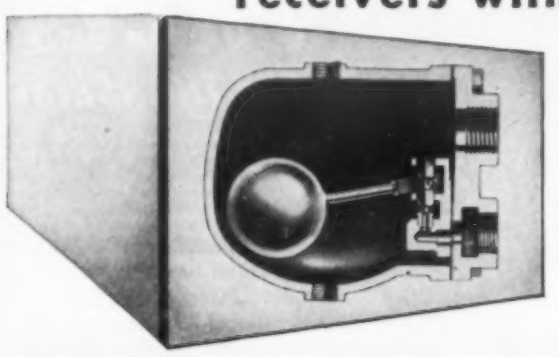
One **needless** shutdown, one **lost** motor, one **destroyed** switch or panel, one **burned out** solenoid . . . May cost you far more than replacing every ordinary fuse with a FUSETRON dual-element fuse.

FUSETRON
TRUSTWORTHY NAMES IN ELECTRICAL PROTECTION
BUSS

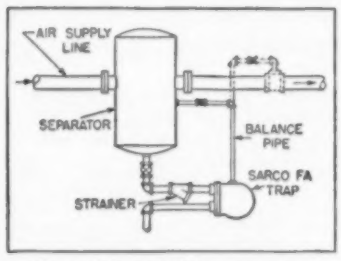
BUSSMANN MFG. CO. (Div. McGraw Electric Co.)
University at Jefferson ST. LOUIS 7, MO.

For more details circle **NED-5614** on enclosed inquiry slip

Drain compressed air receivers with



SARCO FA DRAIN TRAPS



Type FA Trap draining separator.

...also your intercoolers, aftercoolers and separators. These traps automatically release condensate as it forms...without the waste of air that occurs when blowdown valves are used. New technical bulletin No. 5-CA offers many suggestions as to how you can increase the EFFECTIVE capacities of your air compressors. Write today for your free copy. No obligation...of course.

513

sarco COMPANY, INC.
Represented in Principal Cities
Empire State Building, New York 1, N. Y.
SARCO CANADA, LTD., TORONTO 5, ONTARIO

For more details circle NED-5615 on enclosed inquiry slip

NOW—

Get the Newest Service in Fastener Supply!

Up-to-the-Minute STOCK LIST

Continuous Inventory of CAMCAR

AN NAS CT SCREWS
PHILLIPS HEAD SCREWS
INDENTED HEX HEAD SCREWS
SHEET METAL SCREWS
SEMS
STANDARD — SPECIAL
Steel, Brass, Stainless, Aluminum

FOR PROMPT SHIPMENT

Daily production of millions of units means that our stocks are continuously being replaced and expanded. If your urgent needs are not listed in this stock list, it may be that they are in process of manufacture. If not, they can be promptly manufactured for you to your specifications.

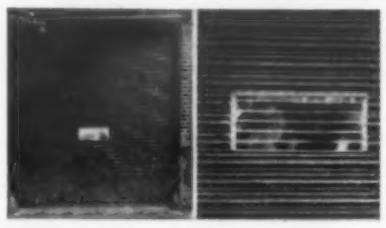
Write For Your Copy of This New Stock List
Request On Your Letterhead Will Bring Regular Mailing
Telephone 5-9451 or Teletype RK-8653

CAMCAR
SCREW & MFG. CORP.
601 EIGHTEENTH AVE., ROCKFORD, ILL.

"PRODUCTION-DESIGNED FOR YOUR ASSEMBLY LINE"

For more details circle NED-5616 on enclosed inquiry slip

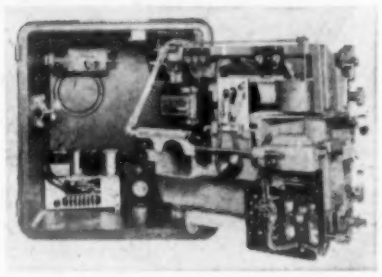
ROLLING DOOR WINDOW
allows looking before opening door



A full-vision rolling window which can be installed in new and existing slat-type rolling doors, coils up overhead with curtain when door is opened, yet preserves solid closure when door is closed. Window allows clear unobstructed view of exterior or interior, admits light and aids in controlling truck movements. It can be furnished 12, 16, 20 or 24 in. high and 20 in. wide. Two or more can be installed in large doors. Window is presently furnished with transparent plastic lights which are shaped and assembled to coil with the door. Made by **Cornell Iron Works, Inc.**, 3604 Thirteenth St., Long Island City 6, N. Y.

For more details circle NED-5617 on enclosed inquiry slip

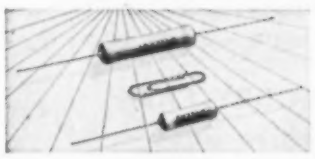
PYROMETER CONVERSION KIT
makes mechanical unit electronic



Kit containing all parts necessary to convert mechanical pyrometers into full electronic operation is offered at a cost approximating one-third that of new electronic equipment. Installation can be performed by an inexperienced operator in 4 hours with screwdriver, soldering iron and pliers. The converter fits most popular makes and gives same performance as factory-built unit. Full range scanning is possible in 1½ seconds. Use can be on chart recorders and indicators. Made by **Pyrometer Service Co.**, 383 River Rd., North Arlington, N. J.

For more details circle NED-5618 on enclosed inquiry slip

MINIATURE RESISTORS
made in 5 and 10-w rated sizes



Small size and self-supporting construction make these miniature power type Axiohm resistors practical for use in radio, electronic and other equipment where space saving and minimum assembly costs are essential. Resistors are made with low temperature coefficient alloy resistance wire wound on tough miniature ceramic cores. No. 20 B.&S. axial leads are tinned for easy soldering and are mechanically anchored and silver brazed to end caps. Entire assembly is encased in Vitrohm enamel forming a hard, crazeless, heat conducting hermetic seal. Resistors are available in rated 5 and 10-w sizes and in wide range of resistance values. Standard resistance tolerance is plus or minus 5 per cent. Made by **Ward Leonard Electric Co.**, 51 South St., Mt. Vernon, N. Y.

For more details circle NED-5619 on enclosed inquiry slip

THREE-WAY STIRRER
three shafts have wide speed range

Designed for wide variety of laboratory uses, this versatile stirrer has three shafts, two of which are geared to the third or rotor, which provides maximum speeds of 140, 825 and 5000 rpm, respectively. Each shaft can be regulated in any intermediate speed from off to maximum by a rheostat. A clutch type clamp makes it easy to swing from one position to another by turning a large wing bolt. The stirring rod, which has an 8-in. shaft, is held by a chuck, capable of holding any rod up to 5/16-in. diameter. The 17-lb base casting accommodates a 28-in. high ¾-in. plated steel support which holds the motor and stirrer. Base will accommodate a 15-in. diameter vessel. the 1/80-hp motor can be used on alternating and direct current. Made by **Fisher Scientific Co.**, 715 Forbes St., Pittsburgh 19, Pa.

For more details circle NED-5620 on enclosed inquiry slip

NEW ADJUSTABLE DRILL JIG
eliminates layout; cuts drilling time

Used for drilling holes through round stock and hex stock from ¼" to 2" and cap screws from ¼" to 1¼", the new Mathewson Adjustable Drill Jig eliminates layout and can cut drilling time on small lots to a fraction. And it eliminates the costs of special jigs for larger quantities. Holes for cotter pins, set screws, drive pins for bayonet joints, oil holes in tubular sections, and wiring holes in cap screws, are all typical of the operation that can be done more economically with this jig. Hole diameters range from .052" to .531", using your A.S.A. standard slip bushings. The hardened V-block has two 60-degree V's for centering round or hexagonal stock, one for ¼" to 21/32" diameter, one for 21/32" to 2" diameter. Adjustable stop for locating work longitudinally for drilling any distance from end, may be used on either side. Adjustable bushing carriers hold slip bushings and clamp work securely. Jig highly successful in permitting use of inexperienced drill operators. For circular write to: **Mathewson Machine Works**, 22 Hancock St., Quincy, Mass. *Advt.*

For more details circle NED-5621 on enclosed inquiry slip

Chemical and Oil Resistant GASKETS

In sizes up to 36", moulded, extruded, clicked or hand cut . . . from special plastic or rubber formulations. High and low temperature applications. Our own mold shop facilitates fast mold production, means close supervision of mold design. Extensive chemical and compounding labs assure accurate formulations for your specific needs.

63C

COLONIAL RUBBER CO.
Oakwood St., Ravenna, Ohio

For more details circle NED-5622 on enclosed inquiry slip

"HET UP" about YOUR wasteful heating SET UP? change to THERMOLIER UNIT HEATERS

Thermoliers provide quick heating from a cold start. Desired room temperatures are easily maintained within a close range. Moreover, heat is forced down to the working level . . . not banked uselessly at the ceiling. The units and the simple piping are overhead where they do not interfere with arrangement of the operating machinery or equipment. Write for Thermolier Catalog.

GRINNELL
THERMOLIER UNIT HEATERS
Grinnell Company, Inc., Providence, R. I.
Coast-to-coast Network of Branch Warehouses and Distributors

For more details circle NED-5623 on enclosed inquiry slip

VEMCO DRAFTING MACHINES

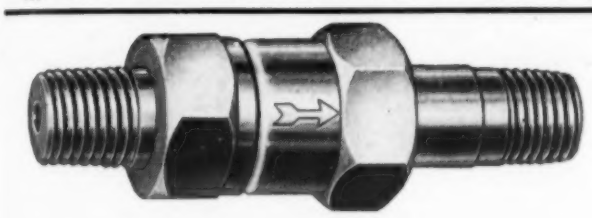
Designed by Engineers for Engineers

1. *Convenient thumb-action indexing for every 15°.*
2. *Simple and positive band tightening device.*
3. *Flexibly articulated arms for easy head movement and flat-lying scales.*

THE engineers responsible for the design of VEMCO Drafting Machines are thoroughly familiar with drafting problems. VEMCO Machines incorporate ALL the facilities desired by the engineer to fill his exacting needs ★ The VEMCO offers smooth, effortless movement . . . positive setting and control for speed and accuracy. flexibility for convenient operation. . elimination of an awkward assortment of drafting tools . sturdy construction for durability. ★ VEMCO Drafting Machines are finished in blue-green metallic color for eye comfort. ★ Ask your VEMCO dealer for a demonstration or write today for illustrated catalog covering drafting machines and drawing instruments.

V&E MANUFACTURING CO.
PASADENA 2, CALIFORNIA

For more details circle NED-5624 on enclosed inquiry slip



Schrader check valves

assure Positive Air Control

Check valves can deliver the correct cycle in a pneumatic control—or any of a hundred different uses.

Air can flow in one direction only through a Schrader Check Valve. Positive sealing action and long service are assured by the large seating area between the metal check and an oil resistant washer. All metal parts are brass, or are heavily plated.

Details on Schrader Check Valves and all Schrader Air Control Products are in the Schrader catalog. Send for your copy today.

A. SCHRADER'S SON
Division of Scovill Manufacturing Company, Incorporated
459 Vanderbilt Ave., Dept. E-47, Brooklyn 17, N. Y.

For more details circle NED-5625 on enclosed inquiry slip

REMEMBER THE NAME . . . Rubyfluid

the easy-to-use Soldering Flux for neat, strong unions.

Use Rubyfluid Flux—liquid or paste—to get neat, strong unions speedily and easily. Rubyfluid is a special fast acting formula, wets out freely, is free from harmful and objectionable fumes, economical to use. Try it—send $1 for special offer—1 pt. liquid, ½ lb. paste flux and helpful booklet.

For Stainless Steel use *Ruby's Stainless Steel Flux,* perfected for that metal.

RUBY CHEMICAL CO.
72 S. McDowell Street Columbus 8, Ohio

Rubyfluid

For more details circle NED-5626 on enclosed inquiry slip

DEHUMIDIFIER
offered for automatic operation with humidity level control

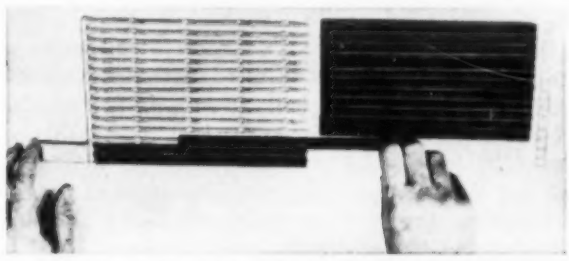
Made for continuous or intermittent operation, model WA-5 industrial dehumidifier can be operated three ways: without automatic control, by plugging into 110-v ac electric outlet and turning on and off as required; with optional plug-in automatic control or humidistat, which can be set for operation to keep desired level of humidity; with humidistat built into front of unit as permanent part of dehumidifier.

Moisture gathering pan can be emptied by hand or removed for connecting the device to drain by pipe or hose. Operating principle is similar to electric refrigerator. Dehumidifier measures 29½ in. high and 13 in. square and weighs 86 lb. It is capable of dehumidifying 13,500 cu ft in enclosed area. Made by **Abbeon Supply Co.,** 179-21 Jamaica Ave., Jamaica 32, N. Y.

For more details circle NED-5627 on enclosed inquiry slip

INDUSTRIAL STORAGE BATTERY
improved grid gives increased life

Use of Silvium silver alloy grid metal in positive-plate grid and noncorroding permanent positive-plate tube sealer are two of six improvements that are incor-



porated in Exide-Ironclad industrial storage batteries for railway, motive power and other heavy duty service. As shown, alloy grid core rods are inserted into slotted hard rubber tubes. Polyethylene plastic bottom bar seals each tube to retain active material in plate. Fine slots in tubes permit ready access of electrolyte to active material, but slots are fine enough to prevent active material from washing away. Other improvements are new homogeneous sealing compound, seamless shockproof jar, unbreakable plastic vent plugs, and a corrosion and impact resisting plastic steel tray coating. Made by **Electric Storage Battery Co.,** Dept. 1-AD, Box 8109, Philadelphia 1, Pa.

For more details circle NED-5628 on enclosed inquiry slip

LOW COST PROTECTION FOR MAN AND MACHINE

ELASTICONE®
GUIDE PIN COVERS

JUST SNAP INTO PLACE

NO TOOLS REQUIRED

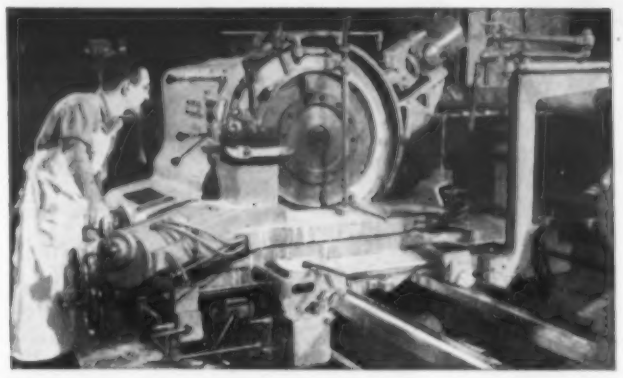
NO INSTALLATION COSTS

Elasticones are manufactured in stock sizes. Specify O. D. of bushing and full open height of set when ordering.

Protects Pins and Bushings from nicks, scratches . . . prevents injuries to Die Setters & Operators. Write for full information.

CENTRAL SAFETY EQUIPMENT COMPANY
2202 E. HUNTINGDON STREET, PHILADELPHIA 25, PA.

For more details circle NED-5629 on enclosed inquiry slip



Maintain good lighting and reduce spoilage by holding proper voltage with G-E Inductrols
(dry-type induction voltage regulators)

Your plant lighting operates best at rated voltage. If, for example, voltage on incandescent lamps drops 10% below normal, lamp brilliance decreases 30% —and workmanship suffers. If voltage rises 10% above normal, lamp life decreases 70% and replacement costs go up. And where fluorescent and mercury vapor lamps are used, similar adverse effects occur.

That's why it pays to install G-E Inductrols. These new dry-type voltage regulators *automatically* maintain correct voltage for your plant lighting and other electric equipment, thus assuring peak operating efficiency.

For more information on Inductrols, contact your local G-E sales representative or authorized agent. Write for bulletins GEC-712, GEC-795, and GER-341, *General Electric Company, Schenectady 5, New York.* 404-92

G-E Inductrols are ideal for light-dimming applications.

GENERAL ELECTRIC

For more details circle NED-5630 on enclosed inquiry slip

HOW TO SELECT THE *RIGHT* MOTOR AND CONTROL FOR YOUR JOB

Name your motor and control need . . . a-c or d-c, from 1 to 700 hp . . . this book has the answers! Gives requirements to consider before selection. Features comprehensive chart, teaming the right motor and control to the right job.

Introduces Westinghouse motor and control features—tells what they mean to you . . . shows modifications and accessories available and explains how they add life and versatility. It's a valuable selection guide with a storehouse of facts. Write for free booklet, Motor and Control Selector Guide, B-5458, Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pennsylvania.

J-21687

YOU CAN BE SURE . . . IF IT'S **Westinghouse**
MOTORS and CONTROLS

For more details circle NED-5631 on enclosed inquiry slip

Hoist Away!

Portable pulling power . . . on the spot. Just plug in this powerful STAMPCO TUGGER wherever an electrical outlet is handy. The TUGGER'S high-torque hoisting motor delivers plenty of power to the drum . . . instantly . . . through a series of precision gears running in a continuous bath of oil.

Drum is reversed, *electrically*, at the flick of a finger. Furnished with either mechanical brake and switch control, or magnetic-type electric brake for remote control stations.

If you are "man handling" those back-breaking lifting and pulling jobs in your plant, remember this—ONE MAN—ONE HAND—ONE FINGER—operates the TUGGER. Reduces labor costs and accidents. A self-liquidating investment. *Write for free Catalog Bulletin today!*

STAMPCO

ST. ANTHONY MACHINE PRODUCTS CO.

2422 East Franklin Ave. • Minneapolis 6, Minn.

For more details circle NED-5632 on enclosed inquiry slip

READ AIR VELOCITIES instantly... accurately... anywhere...

...WITH THE

ALNOR VELOMETER

Alnor Velometer, a precision-built, self-contained, portable instrument, gives you instant, *accurate* readings of air velocities anywhere—in plants, mines, mills or laboratories. Measures speed of air flow through ducts, grilles, furnaces, spray booths or in the open. This rugged instrument needs no special care or delicate handling—anyone can use it and get accurate readings. Needs no calculations or reference charts. Available in a wide variety of scale ranges, and with a full assortment of jets and fittings for every application. You'll want full details and prices, so write for Bulletin 2448-G, Illinois Testing Laboratories, Inc., Room 529-420 No. La Salle St., Chicago 10, Ill.

Alnor PRECISION INSTRUMENTS FOR EVERY INDUSTRY

For more details circle NED-5633 on enclosed inquiry slip

QUICK ANSWERS

TO YOUR QUESTIONS ABOUT STAINLESS TUBING & PIPE!

The Carpenter Stainless Tubing Data Book contains over 90 pages of useful information on subjects such as:

- Corrosion Resistance
- Heat Resistance
- Heat Transfer
- Fabrication
- Sizes & Gauges
- Tolerances
- Special Shapes
- Assembly
- General Physical Properties

For your copy of the Carpenter Stainless Tubing Data Book, send us a note on your company letterhead, indicating your title. Or return the coupon today.

THE CARPENTER STEEL COMPANY

Alloy Tube Division, Union, N. J.

Please send me a copy of the Carpenter Stainless Tubing Data Book.

NAME _____ TITLE _____
(Please Print)

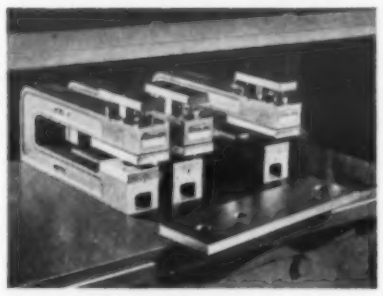
COMPANY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____
(Firm name and title must be on coupon.)

For more details circle NED-5634 on enclosed inquiry slip

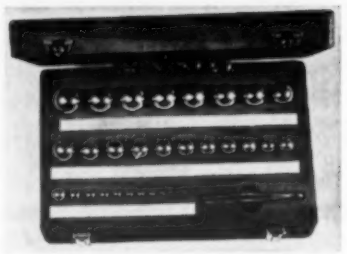
HOLE PUNCHING UNITS for mild steel up to ¾-in. thick



All component parts of type HS extra heavy duty Hydra-Spring hole punching units are built into the holders which keep the round or shaped punches and dies in alignment for the life of the units. Holes can be punched in mild steel up to ¾-in. thick with Wales units, which are independent and self-contained. Only function of the press ram is to depress the punch. The same group of units can be set up on templates or T-slotted plates in stamping presses and on rails, strip templates or T-slotted plates in press brake. Hydra-Spring loads can be changed by a simple adjustment to increase or decrease volume of fluid in the unit. Made by **Wales-Strippit Corp.**, 363 Payne Ave., North Tonawanda, N. Y.

For more details circle NED-5635 on enclosed inquiry slip

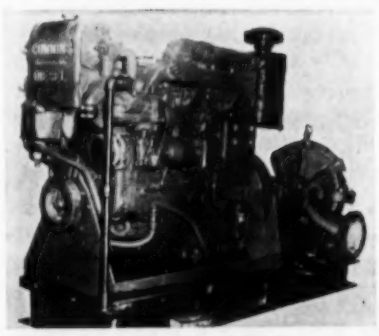
MASTER STEEL BALLS for use in setting comparator gages



Useable as measuring standards, for setting comparator gages and for other applications in the toolroom, gage room and inspection department, two sets of super-precision master balls are made of hardened chrome steel. Balls are held to plus or minus 0.00001-in. in diameter and 0.00001-in. sphericity and have a surface finish of 1 microinch rms or better. Set No. 16 consists of 16 balls from 1/16 to 1 in. diameter in 1/16-in. increments. Set No. 32 has 31 balls from 1/16 to 1 in. diameter in 1/32-in. increments. Each set is furnished with wooden case and tweezers for handling the smaller balls. Made by **Industrial Tectonics Inc.**, Dept. NED, 3684 Jackson Rd., Ann Arbor, Mich.

For more details circle NED-5636 on enclosed inquiry slip

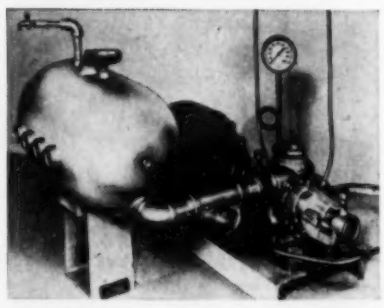
DIESEL-POWERED FIRE PUMPS have 1000, 1500 and 2000 gpm output



Three diesel-powered Peerless fire pumps, approved for fire protection service by Factory Mutual Laboratories, have 1000, 1500 and 2500 gpm capacities and are powered by 150, 200 and 275-hp Cummins diesel engines. Pump heads developed by 5-in. AF-10, 6-in. AF-15 and 8-in. AF-20 pumps are 125, 100 and 100 lb, respectively. The 200-hp, 1500 gpm model is shown. Engines are equipped with heat exchanger, oil cooler, instrument panel, tachometer, hour meter, 24-v electric generating and starting system and cooling water pump. Available from **Cummins Engine Co.**, Columbus, Ind.

For more details circle NED-5637 on enclosed inquiry slip

CONDENSATE RETURN SYSTEM returns hot condensate to boiler



Only heat loss in this closed condensate return system is that actually used in the steam-heated unit. Hot condensate is returned to the boiler. System provides 20 different size pumps for handling 20 volumes from 3300 to 33,000 lb of condensate per hour. Five pressure ranges—25, 50, 75, 100 and 150 psi—are available. Photograph shows arrangement for adapting multiple return lines. Available from **Stansbury Engineering & Sales**, Dept. N-1, 53 W. Jackson Blvd., Chicago 4, Ill.

For more details circle NED-5638 on enclosed inquiry slip

MODERN TIME AND COST SAVERS BUILT BY... Standard GRAVITY & POWER CONVEYORS

SAVE TIME LOADING — UNLOADING WITH THE

E-X-T-E-N-D-O-V-E-Y-O-R

This compact, mobile, easily maneuverable power-belt conveyor unit extends to 46 ft. in either direction and retracts to 9 ft. 10 in. Reaches into cars, trucks, trailers. Handles boxes, bags, bundles, cartons, crates, cases weighing up to 150 lbs. Available in two models—1 way stretch and 2 way stretch—and 4 sizes. Write for Extendoveyor Bulletin—address Dept NED-62.

STANDARD CONVEYOR COMPANY
General Offices: North St. Paul 9, Minn.
Sales and Service in Principal Cities

For more details circle NED-5639 on enclosed inquiry slip

wherever there's a **guess**

instead of a **know**

..... **label it**

with AVERY **Kum-Kleen**

LAID ON *labels*

HOW to label... Pressure-sensitive Avery Kum-Kleen Labels are quickly and easily applied—*Laid on* with a fingertip touch...they're self-adhesive and stick to any clean, smooth surface without moistening, soaking or heating... will not pop, peel or curl even under conditions of extreme temperature and humidity.

Avery designs and prints Kum-Kleen labels to any size, shape and color desired...supplies individually die-cut labels mounted on backing sheets or on rolls for high-speed labeling by Avery Label dispensers.

WHY label... Wherever there's an *unanswered question*—a *guess* instead of a *know*, or a *hesitation* on identification or procedure—Label it with Avery Kum-Kleen Labels and save time, labor and costly mistakes!

WHAT to label...

NAMEPLATES • TRADEMARKS
GUARANTEE LABELS
INSTRUCTION LABELS
APPROVAL SEALS
HOW-TO-USE COPY
DIAGRAM LABELS
MASKING LABELS
INSPECTION LABELS
REPAIR RECORDS

WHERE can you use these labels in your business?

For Example . . . One electronic manufacturer uses Kum-Kleen Labeling to identify component parts and to give vital information to the users of a radio-active meter. Chances are there's some way these labels can be of help to *you* in *your* business.

WRITE now for samples and further information.

AVERY ADHESIVE LABEL CORP.

117 Liberty St., New York 6 • 608 So. Dearborn St., Chicago 5
1616 So. California Ave., Monrovia • Offices in Other Principal Cities

For more details circle NED-5640 on enclosed inquiry slip

Solve "small parts" assembly problems

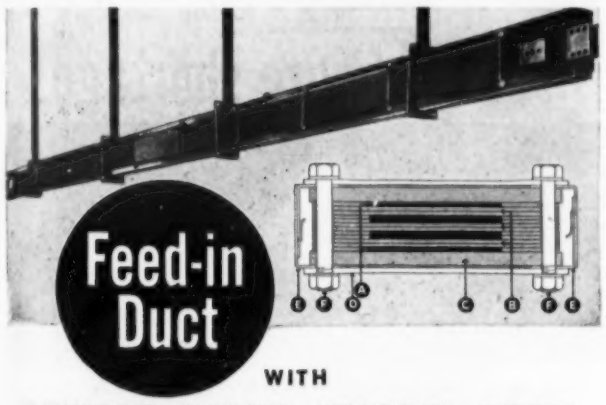
• Assemble • Press
• Rivet • Stake
• Punch • Mark . . .

with ½ ton or 1 ton Han-D-Press the new Hannifin air-operated bench press.

Write HANNIFIN

Hannifin Corporation • 1127 S. Kilbourn Ave. • Chicago 24, Ill.

▲ For more details circle NED-5641 on enclosed inquiry slip ▲



LOWEST KNOWN VOLTAGE DROP

• "One-split bus" design (A) permits close spacing and electrical symmetry for reduced energy loss and low voltage drop.

• Solid ebonized asbestos insulating plates (B) and (C) totally enclose bus—high dielectric strength, conducts heat readily, impervious to moisture and resists arcing.

• Surge clamps (D), and bolts (F) every 24" give structural strength to withstand 50,000 ampere shorts.

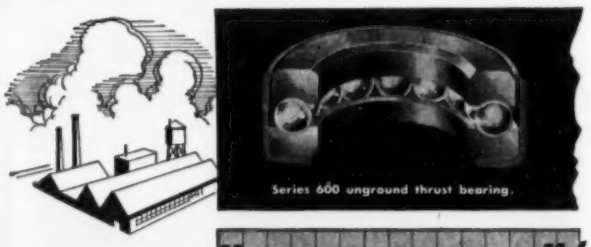
• Steel channels (E) complete housing to exclude dust. Exclusive design requires no ventilating openings for limiting temperature rise.

Write for details. Square D Company, 6060 Rivard St., Detroit 11, Mich.

ASK YOUR ELECTRICAL DISTRIBUTOR FOR SQUARE D PRODUCTS

SQUARE D COMPANY

▲ For more details circle NED-5642 on enclosed inquiry slip ▲



CAUGHT IN THE "SQUEEZE?"

Our 50th Anniversary 1902 - 1952

During this period of National Emergency, there can be no unnecessary waste. Especially is this true for the manufacturer "caught in the squeeze" between ceiling prices and still rising costs of material and labor.

Nice produces complete lines of precision, semi-precision and unground ball bearings, and can help solve your cost problems *without sacrifice of product quality or performance.*

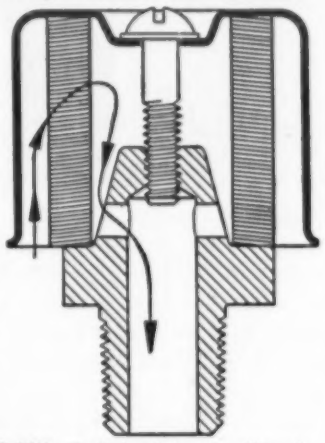
NICE

NICE BALL BEARING COMPANY
NICETOWN · PHILADELPHIA · PENNSYLVANIA

▲ For more details circle NED-5643 on enclosed inquiry slip ▲

AIR VENT FILTERS offer 40 micron filtration

Three sizes, ¼, ½ and ¾-in. pipe thread, are offered in series of ribbon element air vent filters. Element is capable of approximately 40-micron filtration (0.0016-in.). Filter does not wear out and is easily cleaned. Uses include hydraulic systems, air compressor intakes, carburetor intakes for small gasoline engines, crankcase ventilation, pneumatic cylinder, fuel tank breather, immersion or sump filters. Made by **Bendix Aviation Corp.**, Skinner Purifiers Div., 1503 Trombly Ave., Detroit 11, Mich.



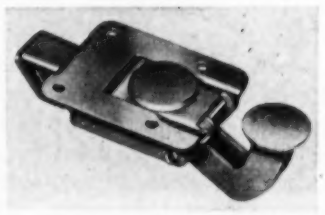
▲ For more details circle NED-5644 on enclosed inquiry slip ▲

PORTABLE SCRAP BOX for handling by crane or hoist

Built of heavy corrugated steel with welded square steel tube frame, this portable scrap box can be handled by crane or hoist. Yoke is lowered over the box and its lifting eyes slip over pivot blocks on the sides of the box. Trip fingers on the yoke prevent box from tipping. When in position to be dumped, a lanyard is pulled to lift the fingers. This action causes box to rotate on pivot blocks which are placed low for high center of gravity. Standard box measures 36 x 42 x 30 in. and has 32 cu ft capacity. Other sizes and casters are available on order. Nesting caps on feet permit stacking. Made by **Equipment Mfg., Inc.**, 21566 Hoover Rd., Detroit 5, Mich.

▲ For more details circle NED-5645 on enclosed inquiry slip ▲

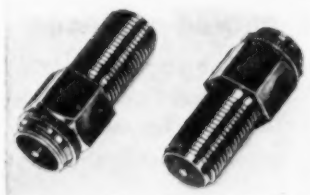
FLUSH LATCH only pushbuttons are exposed



Only cutouts required to install No. H-4100 flush latch can be made by a drill. Exposed parts are recessed and completely flush trigger button and the close button. As forward button is depressed, the rear button rises, providing a grip for opening the door. Lathes are made of stainless steel, cadmium-plated cold rolled steel or aluminum alloy. Made by **Hartwell Co.**, 9037 Venice Blvd., Los Angeles 34, Calif.

▲ For more details circle NED-5646 on enclosed inquiry slip ▲

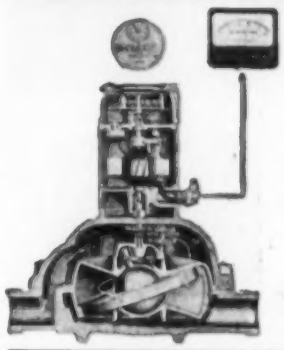
ELECTRO-MAGNETIC PICK-UP operates without physical contact



An electrical impulse generating device that produces voltage ouput proportional to rate of motion or speed of magnetic object, model 3010 electro-magnetic pick-up operates without physical contact when mounted near moving object. It can be actuated by shaft keyway, teeth of a gear, spokes of wheel, slot in rim of wheel or shaft, screw head or pin on moving part, or any vibration or displacement of magnetic material in its field. Applications include measuring acceleration and velocity, triggering or synchronizing cathode ray oscillograph sweep circuits, angular position indicator or reference marker. It will indicate revolutions per minute, count operations, sequences, cycles or motion at rates in excess of 20,000 per second when used with electronic counters. Pick-up weighs less than 2 oz and measures 2 x ⅝-in. diameter. Made by **Electro Products Laboratories, Inc.**, 4504 N. Ravenswood Ave., Chicago 40, Ill.

▲ For more details circle NED-5647 on enclosed inquiry slip ▲

Remote indication and control of liquid flow



Hays VERIFLOW meter accurately measures, indicates, and totals the flow of corrosive and hard-to-meter liquids without using weigh tanks, orifice plates, or gage sticks.

With the Hays VERITROL you simply set a knob at the rate of flow desired . . . then, the VERITROL *controls* the flow of liquid at that set-rate.

for corrosive liquids

Acetic Acid, Aluminum Potassium Sulphate, Ammonia, Calcium Compounds, Carbolic Acid, Formaldehyde, Fruit and Vegetable Juices, Hydrogen Peroxide, Phosphoric Acid, Potassium Hydroxide, Sodium Compounds, Sulphuric Acid (concentrated), Stearic Acid, and many others

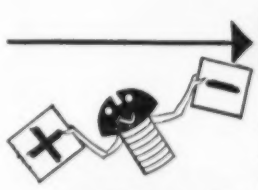
Send for a complete description of Hays Veriflow Meter and Veritrol. Bulletin 48-766

THE HAYS CORPORATION
MICHIGAN CITY 15, INDIANA

▲ For more details circle NED-5648 on enclosed inquiry slip ▲

Tips on Cutting Costs in Ordering Fasteners

You can avoid unnecessary delays and costly misunderstandings by checking the following points when inquiring about or ordering fasteners.

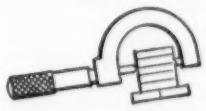


DO

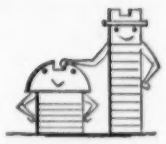
Specify all allowable tolerances —indicate whether all PLUS, all MINUS, or PLUS and MINUS.

Submit sketch if possible (may be rough as long as dimensions are clearly shown).

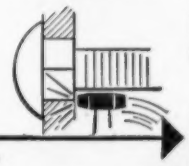
Submit samples if possible.



Specify as liberal tolerances as intended use will permit. (Close tolerances increase costs.)



If any special allowance is to be made for subsequent plating the thickness of plate should be specified.



Where square shoulders are to be subsequently staked over, this fact should be so stated.

DON'T

Don't specify dimensions in decimals when fractional dimensions are sufficient.

Don't specify lengths in units finer than necessary.

REPRINTS *of this chart are available on request for use in drafting and purchasing departments.*

QUALITY PROMCO BRAND

MACHINE SCREWS, NUTS AND SPECIAL FASTENERS ARE OUR BUSINESS

WRITE FOR OUR CATALOG

THE PROGRESSIVE MANUFACTURING COMPANY
46 NORWOOD ST., TORRINGTON, CONN.

▲ For more details circle NED-5649 on enclosed inquiry slip ▲

Powerful, Economical Ventilation

■ The powerful suction of the Sky-Blast sweeps up heat, moisture, dust, smoke and fumes . . . and its strong exhaust shoots them high into the outside air. Regardless of wind direction or velocity, Sky-Blast performance never varies.

Sky-Blast's many features include the famous airfoil propeller of cast aluminum, automatic butterfly dampers that will not leak, and weather-resistant R&M motor. Low, symmetrical silhouette cuts down roof stresses. Units designed for easy mounting on any roof.

Write for Catalog N-680.

2,800 CFM TO 78,800 CFM

PROPELLAIR

SKY-BLAST®
Power Roof Ventilator

PROPELLAIR DIV., ROBBINS & MYERS, INC. • SPRINGFIELD, OHIO

For more details circle NED-5650 on enclosed inquiry slip

VULCAN
ELECTRIC SOLDERING TOOLS

PLUG TIP

All parts replaceable by simply removing 4 screws.

50 WATTS ¼" TIP DIA.
100 WATTS ⅜" TIP DIA.
150 WATTS ⅜" TIP DIA.
150 WATTS ½" TIP DIA.
200 WATTS ⅝" TIP DIA.
300 WATTS ⅞" TIP DIA.

VULCAN ELECTRIC COMPANY
SALEM 7, MASS.
Screw Tip, Plug Tip, Pygmy and Mercury Electric Soldering Tools. Electric Solder Pots and Glue Pots. Electric Branding Irons. Electric Heating Units.

For more details circle NED-5651 on enclosed inquiry slip

when you specify
SYNCHRONOUS TIMING MOTORS
it's sound design economy
to specify the best . . .

Cramer

Dependable, constant speed performance with exceptionally high torque make the Cramer Type SX Permanent Magnet Synchronous Motor your best possible choice for instrument and control applications. A thoroughly engineered product . . . produced under skilled technical supervision . . . and proved in years of field service . . . Cramer Type SX Motors meet a wide range of specifications with clearly stated performance characteristics.

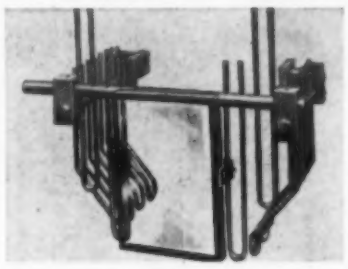
Torque 30 in. oz. at 1 r.p.m. Response so fast that motors reach synchronous speed in 1/2 to 2 cycles, stop within one pole of motion (1/60 sec.) on 240 r.p.m. rotor shaft.

Available with standard gear trains from 60 r.p.m. through 1/24 r.p.h. for 25, 50 and 60 cy. Also available in clutch type, chart drive and reversible units. Send for technical bulletins.

the R. W. CRAMER CO., Inc.
BOX 28, CENTERBROOK, CONN.

For more details circle NED-5652 on enclosed inquiry slip

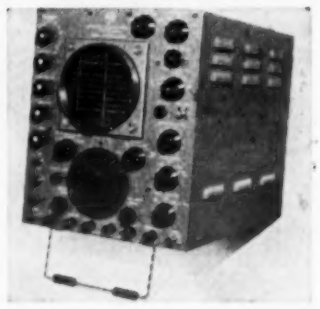
PUNCH PRESS GUARD
promotes operator safety



Good visibility of work for accurate production is a feature of series 25-S adjustable die enclosure guards for punch presses. Transparent center window of laminated safety glass permits vision of entire die area, plus offering protection from flying particles. Individually adjustable steel rods can be raised or tilted to fit the exact contour of different dies or types of work. Entire guard is removable as a unit for changing dies. Type L offset side gate model illustrated adjusts close to dies on strip-feeding operations. Range of sizes and variations is offered to suit diversified requirements. Made by **W. I. Martin & Co.**, 224 S. Michigan Ave., Chicago 4, Ill.

For more details circle NED-5653 on enclosed inquiry slip

OSCILLOSCOPE
is high gain, wide band instrument



Quantitative measurements of high and low speed electrical phenomena can be carried out on model 401 high gain, wide band oscilloscope. It is suited to precise examination of pulse waveforms and transient phenomena. Y-axis has deflection sensitivity of 15 millivolts peak-to-peak per centimeter, frequency response from direct current to 10 millicycles, transient response rise time of 0.035-microseconds, and signal delay of 0.25 microseconds. X-axis sweep range is 0.01-second per centimeter to 0.1-microseconds per centimeter, while delayed sweep range is from 0 to 5000 microseconds in three continuously adjustable ranges. Made by **Laboratory for Electronics, Inc.**, 77 Pitts St., Boston 14, Mass.

For more details circle NED-5654 on enclosed inquiry slip

PARTS FINISHING SYSTEM
machines designed for parts handled

Up to 1440 small parts per hour can be finished by specifically designed equipment which washes, phosphatizes, rinses, dries, dip paints, drains and bakes them, then returns them to station for unloading. In operation, parts are placed on racks and conveyed by Monorail through these various phases, making only two 180-degree turns. One turn carries them through drying oven, while other carries them to paint dipping sequence. Both drying and baking ovens are glassless infrared type units. To allow for variations in drying time, occasioned by temperature or humidity, each oven is wired in four banks for controlling electrical input and heat. System occupies 20-ft square floor space and is 10 ft high. It is made as an integral assembly for moving about in case of plant rearrangement. Made by **Cincinnati Cleaning & Finishing Machinery Co.**, 1952 Hecla St., Ironton, O.

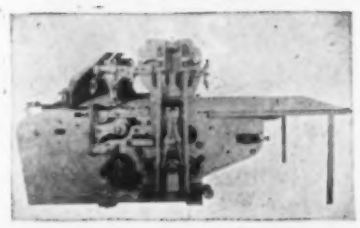
For more details circle NED-5655 on enclosed inquiry slip

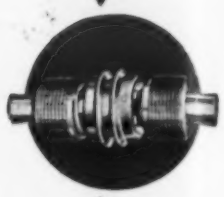
SURFACE COMPARATOR
applies to flat or curved surfaces

Flat or curved surface roughness can be determined by model 100 portable electronic Kota-Meter surface comparator which has roughness range of 1 to 100 microinches, root-mean-square. It evaluates quality of surface finish and indicates it on meter with needle at arrested or frozen position. No visual or mental averaging is required. Comparator was developed to test surface finish at the point of production. Hand-held probe is designed for universal use on radial, longitudinal, internal and external surface shapes. Steel cabinet serves as self-contained carrying case with handle. Unit measures 8¾ x 10⅞ x 10 1/16 in. and weighs 17¾ lb. Made by **Kota-Meters, Inc.**, P. O. Box 6653, Dallas 19, Tex.

For more details circle NED-5656 on enclosed inquiry slip

This Large Machine Has a





Marshmallow-Light Touch

The Peters Marshmallow Depositor performs numerous light-touch, high-speed operations for the baking industry. It's hopper deposits marshmallow or jelly on base cakes, which are fed continuously. ROCKFORD Pullmore CLUTCHES control the power transmission. Let ROCKFORD clutch engineers help design power transmission control for your "light-touch" machines.

ROCKFORD CLUTCH DIVISION
312 Catherine Street, Rockford, Illinois, U. S. A.

B-W ENGINEERING MAKES IT WORK
B-W PRODUCTION MAKES IT AVAILABLE
ENGINEERING BULLETIN SENT ON REQUEST

ROCKFORD CLUTCHES

For more details circle NED-5657 on enclosed inquiry slip

here's your ANSWER to the

colored wire shortage!

E-Z CODE WIRE MARKERS simplify the assembly of wiring circuits by number or standard NEMA color code—answer problems created by a colored wire shortage. They maintain accuracy...minimize rejections...simplify inspection...and get the most from new, inexperienced employees, even when assigned to the most complicated wiring projects. E-Z Codes, with the exclusive Speed-Tab, are faster to remove from carrying card, quicker to apply *(without moistening)* and adhere permanently to wire and cable, even when pulled through conduit. They are unaffected by heat and humidity. E-Z Codes are the efficient, low-cost answer to your colored wire shortage problem.

WRITE FOR SAMPLES TODAY!

Western Lithograph Co.
600 East Second Street
Los Angeles 54, Calif., Dept. NED-6
Box 3804
St. Louis 22, Mo.

For more details circle NED-5658 on enclosed inquiry slip

MAN SAVER

Sweeps up to 400% faster than costly pushbroom cleaning . . . saves money . . . saves manpower

A Parker Floor Sweeper saved $2100 a year for a food manufacturer — $520 a year for a lumber yard—75% of all sweeping costs for a building material manufacturer. *You, too, can save.*

Sweeps all type floors. Collects and sweeps in one operation. Easy to empty. A money-saver for any plant from small garage to large factory or warehouse.

Now available — information file containing time studies, case histories, and full details. *Write, wire, or telephone today.*

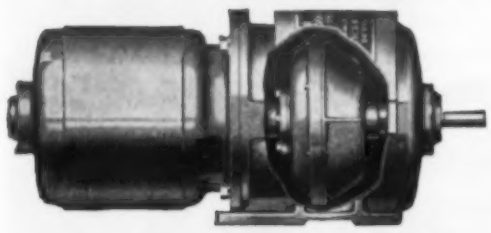
FACT FILE AVAILABLE

PARKER INDUSTRIAL FLOOR SWEEPER

PARKER SWEEPER CO., 61 Bechtle Ave., Springfield, Ohio

For more details circle NED-5659 on enclosed inquiry slip

American Blower TM Type GYROL FLUID DRIVES



AN IDEAL DRIVE FOR:

Agitators, Car Dumpers, Clarifiers, Classifiers, Compressors, Conveyors, Cranes & Hoists, Dredges, Food Machinery, Laundry Machinery, Metal Mills, Mixers, Paper Machinery, Screens, Textile Machinery

Free trial units are available to original equipment manufacturers.

AMERICAN BLOWER

American Blower Corporation, Detroit 32, Michigan

Division of American Radiator & Standard Sanitary Corporation

Serving home and industry: AMERICAN-STANDARD • AMERICAN BLOWER • ACME CABINETS CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILERS • ROSS HEATER • TONAWANDA IRON

For more details circle NED-5660 on enclosed inquiry slip

GAST rotary AIR MOTOR drives agitator for BONDACTOR CEMENT GUN

PROBLEM: Design to feed dry sand-cement aggregate uniformly from mixing hopper to airline of Bondactor Cement Gun.

SOLUTION: Agitate dry mixture with Gast 4 AM rotary Air Motor driven by compressor which supplies gun.

RESULT: Economy, dependability, and needed flexibility in feeding from ½ to 2 cu. yds. of concrete per hour. Unit withstands rough treatment, outdoor use by contractors.

Yes — this is another of scores of design problems solved with Gast rotary Air Motors. If rotary air power is a possibility on your product, let Gast engineers review your problem. You may profit from their concentrated experience with air power, low vacuum or pressure. Remember, "Air may be your answer!" Write for details.

SEE OUR CATALOG in SWEET'S FILE for PRODUCT DESIGNERS

Gast Application Ideas booklet — showing 26 design problems solved — sent upon request.

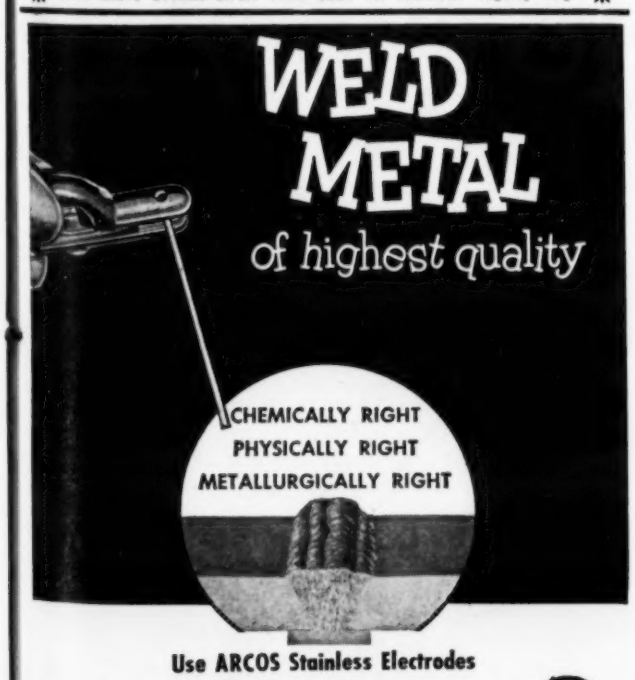
Original Equipment Manufacturers for over 25 years

GAST ROTARY AIR MOTORS (TO THREE H.P.) • COMPRESSORS (TO 30 LBS.) • VACUUM PUMPS (TO 28 INCHES)

GAST MANUFACTURING CORP., 815 Hinkley St., Benton Harbor, Mich.

For more details circle NED-5661 on enclosed inquiry slip

WELD METAL of highest quality



Use ARCOS Stainless Electrodes

When you put Arcos Chromend or Stainlend Stainless Electrodes to work on a critical welding job, you want to be sure of consistent, dependable results. That's why every Arcos Stainless Electrode is tested and retested throughout its manufacture.

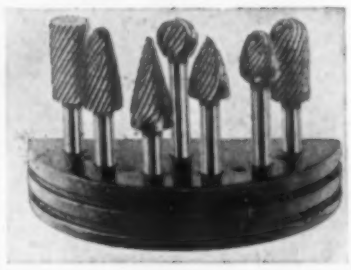
ARCOS CORPORATION
1500 S. 50th St., Phila. 43, Pa.

WELD WITH ARCOS

Stainless, Low Hydrogen and Non-Ferrous Electrodes

For more details circle NED-5662 on enclosed inquiry slip

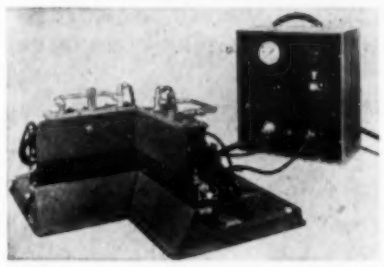
SMALL MILLING TOOL SET
have ¼-in. shank and ½-in. heads



Seven ¼-in. shank high speed Midget Mills can be obtained as a set for fast cutting and cleaning operations on wide range of materials. All of the tools have ½-in. diameter cutting heads. An attractive wooden tool block is also supplied for convenient storage and handling. Tools are made of high speed steel. Price of set No. 77 including tool block is $18.30, less 15 per cent in quantities of 10 or more sets. Made by **Severance Tool Industries Inc.**, 761 Iowa St., Saginaw, Mich.

For more details circle NED-5663 on enclosed inquiry slip

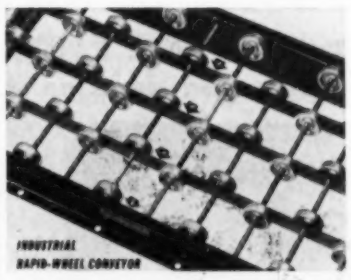
HEAT SEALING DEVICE
right angle jaw seals corners



Incorporation of a right angle heat sealing jaw in the Sentinal angle heat sealers allows it to seal around corners. Illustrated unit has jaw measuring 12 in. on each side, but either or both jaws can be extended to 5 or 6 ft by addition of additional 1-ft jaw units. This arrangement permits side and end seal to be made in one operation, with accurate control of temperature, pressure and dwell time. It is also possible to make a pouch bag with heat seals on three sides by sealing four sides in two operations, then guillotine-cutting in half. U-shaped sealers can also be made. Any right or left hand angle from 0 to 180 degrees can be made. Heat range is up to 500° F and jaw pressures up to 80 lb. Dwell time can be up to 15 seconds. Use can be with all laminated or coated barrier materials. Made by **Packaging Industries**, 50 Church St. N. E., Montclair, N. J.

For more details circle NED-5664 on enclosed inquiry slip

GRAVITY WHEEL CONVEYOR
reinforced with steel center bands

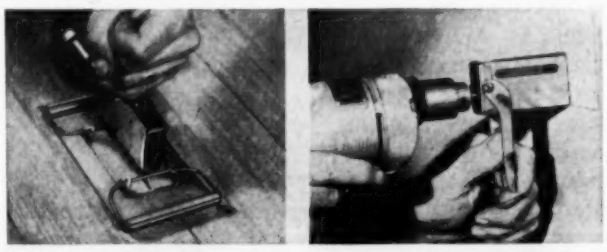


Distributed loads of up to one ton can be handled on 5-ft section of Rapid-Wheel gravity conveyor which features steel center band supporting axles of each lane of wheels at point of greatest strain. Conveyor has 3½ in. deep channel frames of 12-gage steel for extra strength and rigidity. It is made in 5 and 10-ft sections 12 and 18 in. wide and in 45 and 90-degree curves. Available with either tubular or channel-type guard rails, conveyors can be used without rails for handling materials wider than conveyor itself. Made by **Rapids-Standard Co.**, Dept. IRS, 342 Rapistan Bldg., Grand Rapids 2, Mich.

For more details circle NED-5665 on enclosed inquiry slip

SANDER & HACKSAW KIT
for use with ¼-in. electric drill

Anyone with a ¼-in. electric drill can make use of this kit containing a reciprocating sander and portable hacksaw for wood or metal. Kit also includes



six sandpaper sheets and polishing cloth. Sander has 3 x 6-in. surface and takes full ⅝-in. stroke for roughing to finishing jobs. It can be purchased separately if desired. Eleven ounce hacksaw fits into any ¼-in. drill, also takes ⅝-in. stroke and gives full chip clearance on wood, metal or plastic stock up to ¾-in. Made by **Bertram Engineering & Supply Co.**, 3127 Harrison St., Kansas City, Mo.

For more details circle NED-5666 on enclosed inquiry slip

for Fast, Economical Drilling — in all kinds of rock specify . . . easy to operate, easy to transport —

100% Self Contained Gasoline Hammer

ROCK DRILLS

2000 Sharp Blows Per Minute
Drills Rock 20" Per Minute
Rotates Drill and Blows Hole Clean.

LOW INITIAL COST • LOW OPERATING COST • LOW MAINTENANCE COST

405 Lexington Ave., Homer City, Pa.

SYNTRON CO.

Write For Catalog Folder No. GH-2

For more details circle NED-5667 on enclosed inquiry slip

..Fits like a Glove

WHATEVER YOUR ELECTRIC MOTOR REQUIREMENTS THE MOTOR CARRYING THE FAIRBANKS-MORSE SEAL WILL FIT THE JOB ...like a Glove!

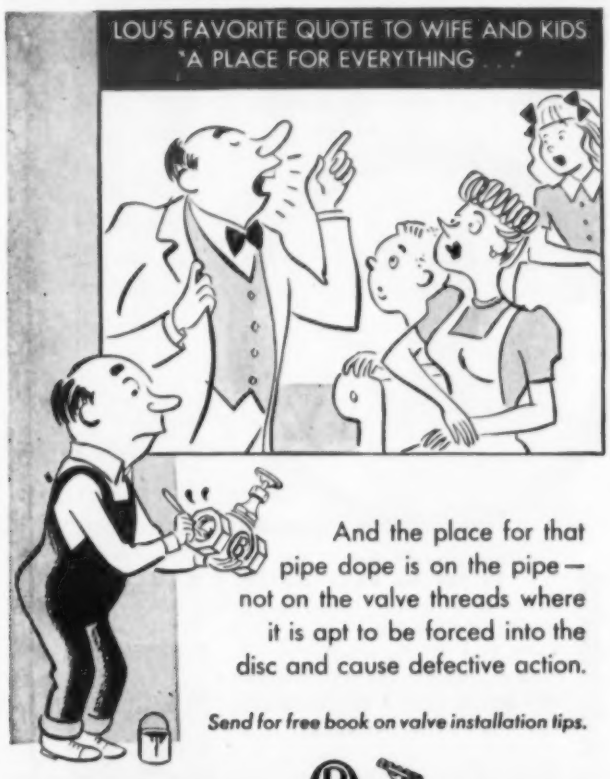
A.C. or D.C. . . . single phase or polyphase . . . induction or synchronous . . . in all ratings and frame types —whatever the need, you can find the one motor best suited to the job in the complete line of Fairbanks-Morse Motors. Call your nearby Fairbanks-Morse electric motor branch for details, or write: Fairbanks, Morse & Co., 600 So. Michigan Ave., Chicago 5, Ill.

FAIRBANKS-MORSE,

a name worth remembering

ELECTRIC MOTORS AND GENERATORS • MAGNETOS • PUMPS
DIESEL LOCOMOTIVES AND DIESEL ENGINES • FARM MACHINERY
SCALES • RAIL CARS • HOME WATER SERVICE EQUIPMENT

For more details circle NED-5668 on enclosed inquiry slip



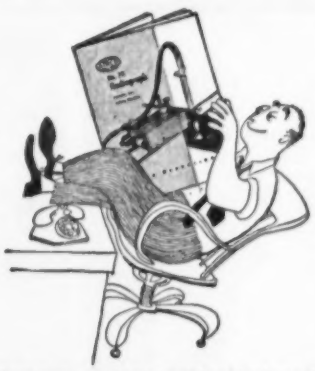
And the place for that pipe dope is on the pipe — not on the valve threads where it is apt to be forced into the disc and cause defective action.

Send for free book on valve installation tips.

Ohio Brass VALVES
MANSFIELD . . . . . OHIO

▲ For more details circle NED-5669 on enclosed inquiry slip ▲

Read the facts about AIRCO'S NEW No. 20 RADIAGRAPH



. . . So you'll know about the first gas-cutting machine designed to carry Aircomatc,® Heliwelding, and other *fabrication* equipment . . .

. . . So you'll be among the first to know how the No. 20 Radiagraph cuts circles, arcs, any length straight lines, simultaneous parallel line – with single or double bevels, and irregular shapes . . .

. . . So you'll know how this 57-lb. one-man portable can be put to work for you, just write us today for your copy of the No. 20 Radiagraph Catalog. Address: Advertising Department, Air Reduction Sales Company, 60 East 42nd St., New York 17, N. Y.

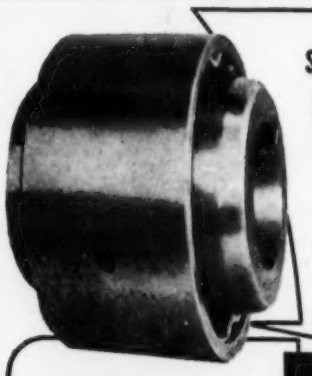
AT THE FRONTIERS OF PROGRESS YOU'LL FIND AN AIR REDUCTION PRODUCT

AIR REDUCTION

AIRCO®

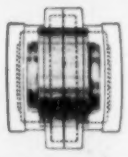
AIR REDUCTION SALES COMPANY • AIR REDUCTION MAGNOLIA COMPANY
AIR REDUCTION PACIFIC COMPANY
REPRESENTED INTERNATIONALLY BY AIRCO COMPANY INTERNATIONAL
Divisions of Air Reduction Company, Incorporated
Dealers and Offices in Principal Cities

▲ For more details circle NED-5670 on enclosed inquiry slip ▲



SAVE SPACE, WEIGHT
REDUCE ASSEMBLY TIME
SLASH DOWN-TIME
CUT MACHINE WEAR
STRONGER, SAFER
LONGER LIFE

3/5 USUAL SIZE!
1/2 USUAL WEIGHT!



Sier-Bath Gear Coupling compared with two major conventional types of same shaft size, HP rating.

ONLY 7 PARTS—
Assembled, Uncoupled in seconds!

Sier-Bath
Flexible
GEAR COUPLINGS

The *only* really *modern* gear couplings! Make possible more compact designs . . . cut assembly costs, down-time. Put less strain on shafts, bearings. Safer, trouble-free—no heavy flanges, no bolts to freeze, seize, strip or corrode.

WRITE FOR BULLETIN! Gives installation photos, specs for standard, vertical, mill motor, floating shaft types—sizes 7/8 to 6, HP 4 to 550. (Special sizes and types on request.) Distributors in principal cities.

9240 HUDSON BOULEVARD
NORTH BERGEN, N. J.

Also Manufacturers of Precision Gears and Screw and Gearex Rotary Pumps

Sier-Bath
GEAR and PUMP CO., Inc.

▲ For more details circle NED-5671 on enclosed inquiry slip ▲

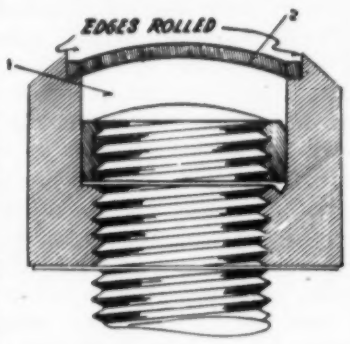
VOLT-AMMETER
measures without shutting off circuit

Capable of measuring current instantly without interrupting the circuit or shutting down equipment, Amprobe model 600 snap-around volt-ammeter is pocket-sized and can be belt mounted. It has six ammeter and three voltmeter ranges of 0-15/30/60/150/300/600 amp ac and 0-150/300/600 v ac. Meter has doughnut type transformer which eliminates the factor of error due to position of conductor within probe jaws. Voltage test lead plug is automatically insulated by snap-out sleeve when removed from the meter. Probe jaws are insulated. Made by **Pyramid Instrument Corp.**, Dept. NED, Lynbrook, N. Y.

▲ For more details circle NED-5672 on enclosed inquiry slip ▲

CAP TYPE LOCKNUT
protects ends of bolt

Moisture and corrosive elements which destroy bolt ends and make a nut difficult or impossible to remove are excluded by a cap type Caploc locknut. A heat treated alloy spring steel insert acts as a locking device, with the load being carried entirely by the nut body. The insert is elliptical in shape, but is forced into round by the bolt as it passes through. An ear on the insert prevents the nut itself from turning in service. Fastener stays where it is wrenched, regardless of vibration, but can be adjusted, removed and reapplied a number of times. It need not be tightened against a bearing surface to hold fast. Made by **Security Locknut Corp.**, 1500 North Ave., Melrose Park, Ill.



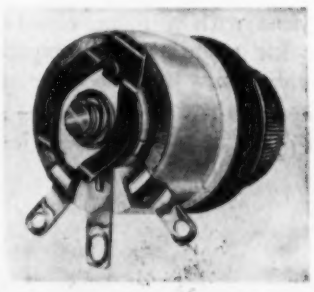
▲ For more details circle NED-5673 on enclosed inquiry slip ▲

ADHESIVE TAPE PACKAGE
serrated edge on cover cuts tape

Need for scissors to cut desired length of Red Cross adhesive tape is eliminated with the Cut-Quick package. Serrated edge of cover does necessary cutting of tape. End of tape always remains free of roll and easy to grasp. Tapes ½ and 1-in. wide are available. Made by **Johnson & Johnson**, New Brunswick, N. J.

▲ For more details circle NED-5674 on enclosed inquiry slip ▲

25-WATT RHEOSTAT
for potentiometer or rheostat use



Maximum wattage dissipation and added safety factor of high temperature blue-gray enamel are features of A-25 (25-w) rheostat. Unit is equipped with three tinned lug terminals for either potentiometer or rheostat use. Terminals are corrosion resistant and permanently welded to winding form. Wire winding on toroidal ceramic form is securely bonded to minimize troublesome connections. Wound ring is made integral with refractory base by vitreous enamel, and shafts are insulated from all live parts. Units are made in 19 resistance sizes ranging from 0.50 to 1500 ohms and in maximum amperage ratings of 7.06 to 0.129, respectively. Shaft rotates 285 degrees. Made by **Hardwick, Hindle, Inc.**, 38 Hermon St., Newark 5, N. J.

▲ For more details circle NED-5675 on enclosed inquiry slip ▲

ONE for PLANT MAINTENANCE
for CRATING AND BOXING
for CONSTRUCTION WORK
for PATTERN SHOPS

DE WALT
is A COMPLETE power shop

A De Walt is a complete power shop in *one* machine. It saws at any angle, it dadoes, routs, shapes, tenons, grinds, sands, drills, and even does light metal cutting. For one small investment, in money and in floor space, you get the equivalent of a warehouse full of cutting equipment. Write for catalogue to De Walt Inc., Dept. G-6, Lancaster, Pa.

DE WALT
POWER SAWS
DE WALT INC., Lancaster, Penna.
Subsidiary of American Machine & Foundry Co., New York

▲ For more details circle NED-5676 on enclosed inquiry slip ▲

P-M is a new Bulk-Handling Method

Prime-Mover is used to expedite the handling of bulk materials. Here is a new method to stop waste of time and men on jobs that are now done by hand or other slow means. Information to help you buy is available on request.

THE PRIME-MOVER COMPANY
MUSCATINE, IOWA

The Bell PRIME-MOVER

▲ For more details circle NED-5677 on enclosed inquiry slip ▲

KEYNOTES

THIS GUY DOESN'T KNOW ABOUT KEY-TITE . . . THE PERMANENT SEAL THAT BREAKS EASILY!

Write for FREE sample today!

SEALS TIGHT . . .
BREAKS RIGHT!
A Product of KEY COMPANY

KEY-TITE WATER PROOF PIPE JOINT COMPOUND

2601 McCasland • East St. Louis, Illinois

▲ For more details circle NED-5678 on enclosed inquiry slip ▲

Tube Swelling Can't Happen Here

Concord #20 STEAM HOSE

Patented CONCORD #20 Steam Hose is constructed with a special stainless steel inner wire braid that cannot swell.

This means you always have a full pressure flow because tube constriction can't occur.

Re-coupling is performed easily, quickly, with no complications.

Other construction features include — alternate high tensile steel wire and rubber layers firmly bonded over the outside of the tube for maximum burst protection. Asbestos braid provides positive cover adhesion and acts as cover insulator. Tough, abrasion-resistant cover withstands the most severe abuse.

CONCORD #20... flexible, tough, dependable... is the steam hose you'll want to have working for *you!*

Another Quality Product of

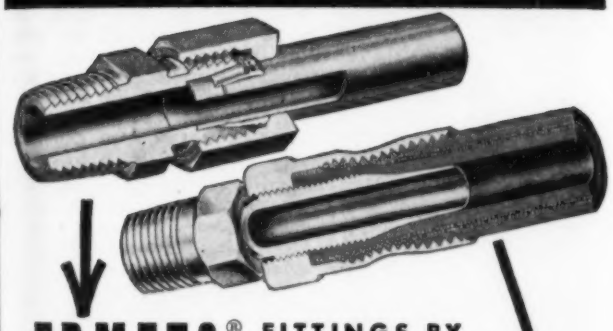
BOSTON WOVEN HOSE & RUBBER CO.

Distributors in all Principal Cities

PLANT: Cambridge, Mass. • P.O. Box 1071, Boston 3, Mass., U.S.A.

▲ For more details circle NED-5679 on enclosed inquiry slip ▲

WANT HYDRAULIC CONNECTIONS *FAST?* SPECIFY THESE WEATHERHEAD TIME-SAVING TWINS



ERMETO® FITTINGS BY WEATHERHEAD

Save up to 60% of installation time on steel tubing installations—up to 40% on copper and aluminum. You can make tube connections at all pressures with only a wrench—no special tools required.

Quick! Safe! Economical!

WEATHERHEAD ALL-STEEL REUSABLE HOSE ENDS AND INDUSTRIAL HOSE

Permit quick make-up of flexible lines from stock. Any length—whether low pressure or high—installation of hose assemblies with REUSABLE hose ends is quick and easy with ordinary bench tools.

Saves time—saves inventory.

ASK FOR FULL INFORMATION

ERMETO—catalog No. E-1457 contains complete details on all sizes available in steel and stainless steel.

REUSABLE HOSE ENDS AND HOSE—catalog No. H-1451 lists complete range of hose sizes and pressures available for use in general industry.

Address: Dept. F-2, THE WEATHERHEAD COMPANY, 300 East 131st Street, Cleveland 8, Ohio. In Canada, THE WEATHERHEAD COMPANY OF CANADA, LTD., St. Thomas, Ont.

Weatherhead Industrial Warehouse Distributors in all principal cities.

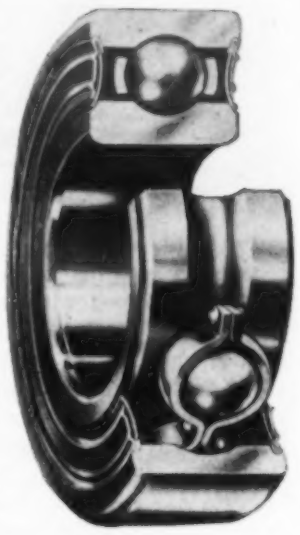
The Mark of Quality

WEATHERHEAD

FIRST IN HYDRAULIC CONNECTIONS

▲ For more details circle NED-5680 on enclosed inquiry slip ▲

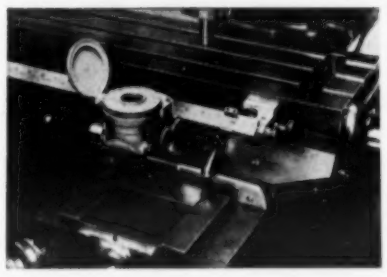
BALL BEARING is of sealed construction



Interchangeable with conventional bearings, Red Seal ball bearings are designed to exclude dirt and retain lubricant. DuPont Fairprene seal is unaffected by petroleum-base lubricants, normal operating temperatures and ageing. Rib-reinforced retaining rings and low-friction contact are features of seal. These factory lubricated bearings are offered in standard single-row SAE widths. Made by **SKF Industries, Inc.**, Dept. 616-A, P. O. Box 6731, Philadelphia 32, Pa.

▲ For more details circle NED-5681 on enclosed inquiry slip ▲

MACHINE TOOL SCALE makes linear measurements optically



Precise, yet simple, optical method of making linear measurements on machine tools is provided by Scan-A-Scale which eliminates need for micrometers, standards and dial indicators. Instrument consists of two microscopes and two scales graduated in 0.050-in. Readings to four decimal places are possible. Uses include controlling table movement and boring head location on jig borers and boring mills, positioning lathe carriages longitudinally, locating milling machine table in respect to spindle in three planes and positioning cylindrical grinding machine tables in relation to wheel side. Made by **F. T. Griswold Mfg. Co.**, 0305 W. Lancaster Ave., Wayne, Pa.

▲ For more details circle NED-5682 on enclosed inquiry slip ▲

CONDUCTIVE BOOTIE assures skin to floor contact

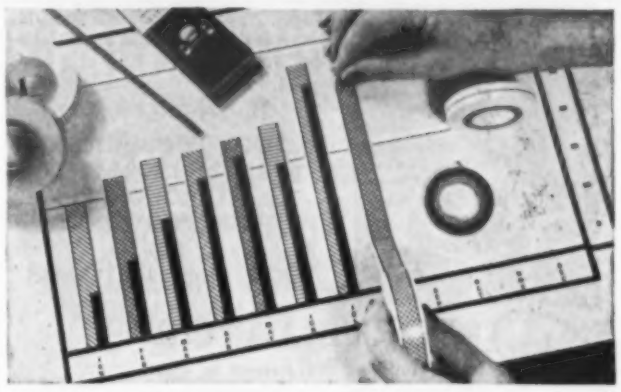
Static electricity explosions can be reduced by wearing of conductive bootie, worn comfortably over ordinary shoes to assure skin-to-floor contact. Contact is maintained by chain which connects conductive sole with metal plate worn in an elastic garter around the calf of the leg, or on the flexible conductive band at the top of the bootie. Tested to 250,000 ohms, it offers protection in case of direct contact with live wire or short circuit. Three male and female sizes offered can be sterilized. Made by **Walter G. Legge Co.**, Dept. NED, 101 Park Ave., New York 17, N. Y.

▲ For more details circle NED-5683 on enclosed inquiry slip ▲

PNEUMATIC IMPACT WRENCH is reversible and portable

Two spindle sizes, size 24 with ½-in. square drive and size 24S with 7/16-in. hexagon quick-change chuck integral with spindle, are incorporated in Thor ⅜-in. portable pneumatic reversible impact wrench. It has side handle and trigger type throttle and weighs 5¾ lb. Reversing valve is on back. Air motor transmits power to impact mechanism through a torque increasing planetary gear system. Tool can be equipped for vertical or horizontal suspension or used with overhead balancers. Made by **Independent Pneumatic Tool Co.**, 175 N. State St., Aurora, Ill.

▲ For more details circle NED-5684 on enclosed inquiry slip ▲



Amazing NEW METHOD for Making GRAPHIC CHARTS SIMPLER • QUICKER • BETTER!

Professional Charts can be made quickly, economically by you, your secretary, or any member of your staff—by the

CHART-PAK METHOD

Here's all you do: On a Chart-Pak board, plan the kind of chart you want. Select the proper Chart-Pak materials. A little finger pressure and a little typing does the rest. That's all there is to it. Your chart is ready for presentation or reproduction.

And Note This: Any portion of your Chart-Pak chart can be quickly changed or corrected at any time. What could be more economical?

ATTACH TO YOUR LETTERHEAD

Send me descriptive brochure on the Chart-Pak Method for Organization Charts ( ) Statistical Charts ( ) Office Layouts ( )

CHART-PAK, INC. 104-V LINCOLN AVE. STAMFORD, CONN.

▲ For more details circle NED-5685 on enclosed inquiry slip ▲

Ask Pop or any other experienced shop foreman. He'll tell you the plant couldn't run without that dependable source of supply—the industrial distributor. Who else has the tools, machines, parts, supplies, accessories you need, conveniently near and ready for fast shipment?

Your industrial distributor relieves you of a lot of headaches. He takes over the time-consuming work involved in scattered direct-buying contacts. He expedites purchase orders and deliveries. He knows about a wider range of tools for industry than any one manufacturer can know. And he's ready to share his broad knowledge toward solving production problems and keeping your men abreast of mechanical improvements and new techniques.

Take files: He stocks a big assortment of regular and special types, cuts and sizes. And he's a big help in picking *The right file for the job*, whether for exacting or mass-production work.

Marketing through distributors is a policy that has made Nicholson files and Nicholson quality available to industrial file users from coast to coast.

NICHOLSON FILE CO. • 34 Acorn St., Providence 1, R. I.

(In Canada, Port Hope, Ont.)

NICHOLSON U.S.A. **NICHOLSON** *A FILE FOR EVERY PURPOSE*

▲ For more details circle NED-5686 on enclosed inquiry slip ▲

Yates-American *Chooses* CARTER JIFFY TIRES

. . . because they end all bandsaw tire problems

Solves all bandsaw tire problems! That's why you'll find Carter Jiffy Tires on the new "J" Line 20" bandsaw manufactured by Yates-American Machine Co., Beloit, Wis. What's more, these revolutionary tires outwear other tires 2 to 4 times. And when replacement is needed, anyone can replace them in 10 minutes—and have a perfect wheel. Write for free, illustrated folder.

Carter

CARTER PRODUCTS CO., INC.
421 Wm. Alden Smith Bldg.
30 Ionia Avenue, S. W.
Grand Rapids 2, Michigan

CUTS COSTS WAY DOWN!

▲ For more details circle NED-5687 on enclosed inquiry slip ▲

Power positioning of material increases production in sheet feeding operation.

perhaps
YOUR PRODUCTION CAN BE INCREASED THROUGH POWER POSITIONING OF TOOLS AND MATERIALS

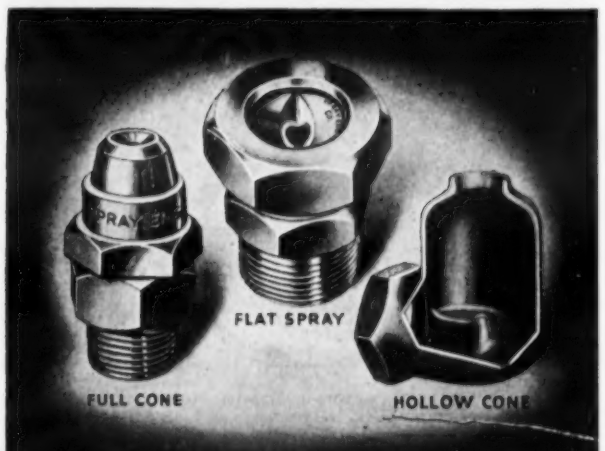
PORTELVATOR®
has supplied the answer to others.

Start a beneficent chain reaction now; write for
BULLETIN P-507

Twenty-five ton capacity, self loading, self discharging die transfer table.

THE Hamilton TOOL COMPANY
901 HANOVER STREET • HAMILTON • OHIO • U • S • A

For more details circle NED-5688 on enclosed inquiry slip



SPRACO NOZZLES

Write for NOZZLE CATALOG *to*
SPRAY ENGINEERING CO.
106 CENTRAL STREET • SOMERVILLE 45, MASS.

For more details circle NED-5689 on enclosed inquiry slip

New XL BOND
FOR CARBIDE TOOL AND CUTTER
GRINDING

"XL" is Chicago Wheel's exclusive new bond for silicon carbide vitrified grinding wheels, especially made for grinding carbide cutting tools. Ideal for rough and finish grinding . . . offhand or precision automatic. Supplied in most popular sizes and steel backs. Prompt delivery. Keep your production up . . . costs down, with "XL."

Write today for information—Dept. NED

CHICAGO WHEEL & *Mfg. Co.*
1101 West Monroe St., Chicago 7, Illinois
OFFICES IN PRINCIPAL INDUSTRIAL CENTERS

For more details circle NED-5690 on enclosed inquiry slip

STEEL DRAWER CABINET can be stacked on each other

This all steel 18 x 14 x 34 in. drawer cabinet holds 18 drawers measuring 5½ x 3½ x 17 in., ample enough in size to hold 3 x 5 in. cards as well as nuts, bolts, screws, electrical and hardware supplies, laboratory supplies and other such bulk items. Drawers are equipped with two dividers adjustable on 1-in. centers. Label holders are furnished on every drawer and divider. Cabinets can be stacked on each other for maximum storage capacity in minimum of space. They are finished in olive green bake-on enamel. Made by **Aurora Equipment Co.**, Equipto Div., 690 Prairie St., Aurora, Ill.

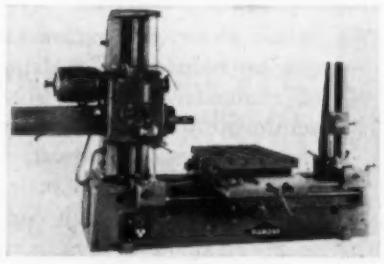
For more details circle NED-5691 on enclosed inquiry slip

DRUM-CARRYING LIFT TRUCK holds four drums in upright position

Engineered angles incorporated in design of Tray-Hart four-drum carrier automatically place drums in gripping position as the drum carrier frame is lowered over the load. Carrier attachment weighs 750 lb, is 54 x 51 in. and is mounted on a 3000-lb capacity model A-3444 Jeep lift truck. Front of the carrier can be used to push drums into pickup position. A misalignment compensator automatically shifts the carrier up to 4 in. when the truck is not in line with the load. Gripping shoes have nonslip lining and quickly conform to drum contour and position. A hydraulic power unit control on truck activates the load-releasing mechanism, applying pressure to retract the shoes. Made by **Mercury Mfg. Co.**, 4038 S. Halsted St., Chicago 9, Ill.

For more details circle NED-5692 on enclosed inquiry slip

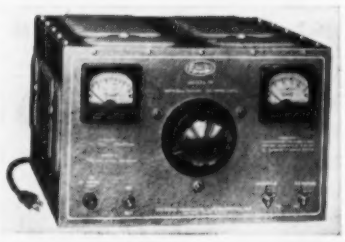
HORIZONTAL BORING MILL has 18 speeds and rapid traverse



Infinite control of feeds on facing head, 18 feeds with rapid traverse in all directions and 10-hp motor with amperage load regulator are features of AL 72 3-in. horizontal boring mill. It has a 3-in. diameter spindle with No. 5 Morse taper and maximum spindle run of 32¼ in. Diameter of platform is 25 in., turntable dimensions are 34¼ x 25¼ in. and maximum distance from platform to counter support is 70 in. Longitudinal table run is 45¼ to 57⅞ in., while transverse table run is 24 in. and maximum distance of spindle over table is 29⅞ in. Made by **Diamond Machine Tool Co.**, 3425 E. Olympic Blvd., Los Angeles 23, Calif.

For more details circle NED-5693 on enclosed inquiry slip

DIRECT CURRENT POWER SUPPLY quickly tests electronic equipment



Filtered for less than 1 per cent alternating current ripple or hum at top load, model NF direct current power supply has output range of 0 to 28 v up to 15 amp. One control furnishes continuous voltage adjustments for different load conditions. Instrument allows fast testing and servicing of aircraft, tank and marine electronic equipment. Other applications include research, laboratory instruments, solenoids, relays, telephone circuits, plating operations and other low voltage dc equipment operated from ac lines. Equipment has 0 to 36 v output up to 6 amp continuous duty, up to 25 amp at intermittent loads, 115 v 50/60 cycle input and 730 w at 28 v 15 amp. Made by **Electro Products Laboratories, Inc.**, 4504 N. Ravenswood Ave., Chicago 40, Ill.

For more details circle NED-5694 on enclosed inquiry slip

It's New!

- it's different
- it's an "all-use" vinyl primer
- it virtually eliminates surface preparation
- it brushes easily — sprays beautifully
- it dries hard in minutes
- it provides excellent adhesion
- it goes under any type finish

it's TYGORUST

use it on wet or dry rusted steel, on wood, on concrete, on previously painted surfaces.

U. S. STONEWARE
Akron 9, Ohio
WRITE RIGHT NOW FOR DETAILS!

For more details circle NED-5695 on enclosed inquiry slip

SMALL AIR CYLINDER PACKS POWERFUL PUNCH

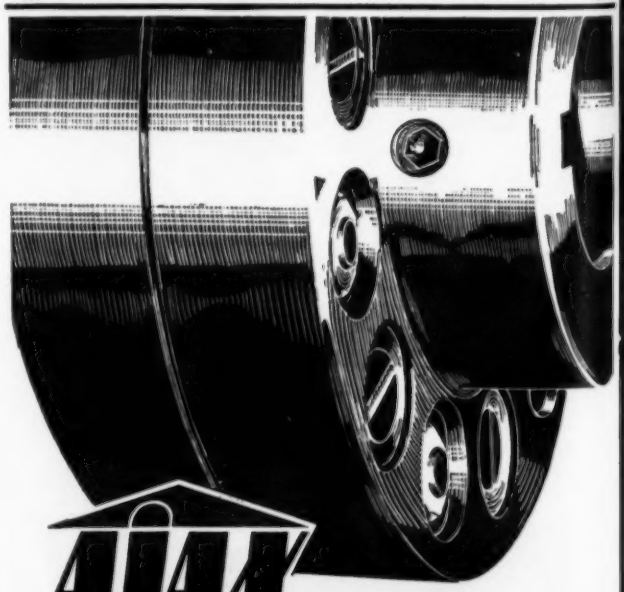
At 100 lbs. air line pressure this Super-Speed 2½" bore Bellows Air Motor develops enough force to punch a ½" diameter hole through 1/16" thick mild steel. The speed of the piston rod is six to ten times the maximum speed of a standard air cylinder of the same bore.

BUILT-IN VALVE AND CONTROLS
The Super-Speed Bellows Air Motor comes complete with either a built-in manually operated valve or the Bellows Electroaire electrically-controlled valve, with or without safety controls. Standard stroke length: 2", 2½", 4", 6", 9" and 12".

Write Today for Bulletin CL30
Learn how you can use Bellows "Controlled-Air-Power" to produce more — at less cost. Address The Bellows Co., Dept. NED 652.

THE Bellows CO.
AKRON 9, OHIO

For more details circle NED-5696 on enclosed inquiry slip



AJAX RUBBER BUSHED
FLEXIBLE COUPLINGS
standard of industry for 30 years

● Protect expensive direct-driven machines against damage from unavoidable misalignment. Cut machine design, installation and maintenance costs. Write for bulletin.

AJAX FLEXIBLE COUPLING CO. INC., WESTFIELD, NEW YORK
Incorporated 1920

For more details circle NED-5697 on enclosed inquiry slip

Time available

FOR

CENTRIFUGAL CASTING

Non-Gran supplies both aluminum and tin bronze centrifugal castings, as well as bronze sand castings. Send prints. American Non-Gran Bronze Co., Berwyn, Pa.

NON-GRAN — PRECISION MACHINE WORK — CASTINGS • SAND & CENTRIFUGAL

▲ For more details circle NED-5698 on enclosed inquiry slip ▲

Why skilled workmen Choose

RIDGID

PIPE VISES

8 sizes for pipe from ⅛" to 6"

It's extra easy to work with RIDGID Bench Yoke Vises

★ All have handy integral pipe rests and benders.

★ Yokes and bases of strong special malleable; top quality tool-steel jaws—LonGrip jaws up to 6" capacity.

★ Made in bench, post, kit, stand and tristand models. Chain vises in bench, post, stand and tristand models.

★ Buy work-saver RIDGID vises at your Supply House.

THE RIDGE TOOL COMPANY • ELYRIA, OHIO

RIDGID Work-Saver Pipe Tools

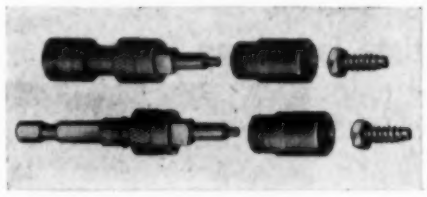
▲ For more details circle NED-5699 on enclosed inquiry slip ▲

PORTABLE ZONE HEATER has improved heating capacity

Up to 189,000 Btu per hour is delivered by improved model portable space heater known as the Dual Purpose model PW-189. This is 49,000 Btu more than capacity of previous models. Heat is sprayed out at floor level to form a 6-ft high warm air blanket over an area of approximately 3000 sq ft. By simply changing top blower mounting, heater is easily converted for summertime use as a cool air blower which can deliver 1500 cfm. Made by **Fageol Heat Machine Co.**, 5725-N Mt. Elliott Ave., Detroit 11, Mich.

▲ For more details circle NED-5700 on enclosed inquiry slip ▲

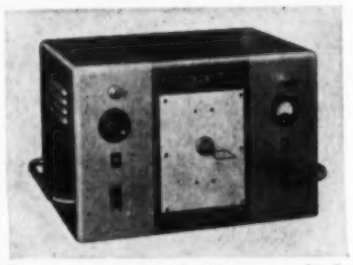
MAGNETIC DRIVING DEVICES used with power screw drivers



Driving of hex head hardened and self-tapping screws is facilitated by a magnetic adapter and magnetic hexagon-square shank for use with Williams impact Supersockets. Telescopic magnetic device in assembled socket contacts the screw head to hold it in the socket opening. An Alnico magnet, imbedded in the drive member, is spring loaded to overcome air gaps. The left hand threaded socket connection provides a positive fastening of the socket to shank or adapter. Hexagon-square shank and an adapter are available for ¼-in. drive size tools with socket openings of ¼, 9/32, 5/16 and ⅜-in. Made by **J. H. Williams & Co.**, Dept. NED-6, 400 Vulcan St., Buffalo 7, N. Y.

▲ For more details circle NED-5701 on enclosed inquiry slip ▲

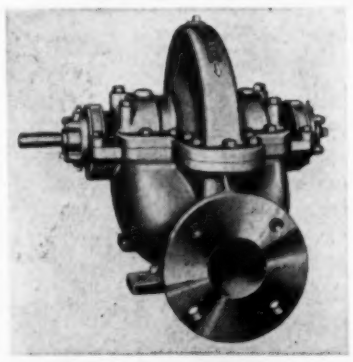
ELECTRONIC HEATING UNIT for soldering, hardening, annealing



Made for use with either ferrous or nonferrous metals by unskilled operator, model 1500 electronic high frequency heating unit is applicable for soldering, brazing, hardening and annealing. The 350-lb unit is controlled by an automatic timer switch that can be preset from 0 to 60 seconds. Object to be heated is placed within a copper work coil on front of unit. Parts can be heated while in motion on a conveyor or turntable. Physical contact with coil does not cause discomfort to operator. Output is 1500-w NEMA standard, frequency is 400,000 cycles and supply is 220 v, 60 cycles. Unit is water and air cooled. Made by **Lewis Machine Co.**, Dept. KP, 892-4 Newcomb St., St. Paul 6, Minn.

▲ For more details circle NED-5702 on enclosed inquiry slip ▲

GENERAL PURPOSE PUMPS feature mechanical shaft seals

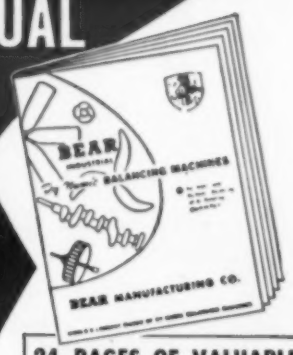


Type AS horizontal split-case general-service centrifugal pumps are available in discharge sizes from 1½ through 4 in. and with capacity range up to 750 gpm and head range up to 230 ft. They can be used for pumping water and clear liquids up to 200° F where no solids are in suspension. Mechanical shaft seals are incorporated, with savings in floor space and shaft length and easier servicing resulting. Split-case design allows removal of top half of pump case for inspection and maintenance of rotating elements. All types of drives are available with the pump line. Made by **Food Machinery & Chemical Corp.**, Peerless Pump Div., 301 West Ave. 26, Los Angeles 31, Calif.

▲ For more details circle NED-5703 on enclosed inquiry slip ▲

FREE MANUAL

tells how **DY-NAMIC BALANCING** CAN IMPROVE YOUR DEFENSE PRODUCTION!



This New "Bear" Manual will show you how Dy-Namic Balancing can aid your defense production program these two ways:

1 Improve finished product performance by eliminating mechanical failures and assuring greater efficiency and longer life. Gives you the quality standards to help meet many government contract specifications.

2 Keep your own equipment operating without interruption. Periodic checking and Dy-Namic Balancing of rotating parts in your machinery and production equipment will reduce bearing wear and noise and eliminate costly downtime for repairs.

Write today for your free copy. Bear Mfg. Co., Dept. N-5, Rock Island, Illinois.

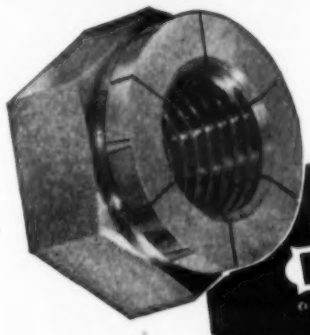
24 PAGES OF VALUABLE INFORMATION LIKE THIS:

- How To Balance Parts From 4 Oz. to 8 Tons!
- What Is Dy-Namic Un-balance?
- The Difference Between Static and Dy-Namic Un-balance!
- How To Balance Rotating Parts Statically and Dy-Namically In One Operation!
- How Other Plants Are Using Dy-Namic Balancing To Save Time and Money!
- How Dy-Namic Balancing Improves Product Performance!
- How Dy-Namic Balancing Reduces Wear, Eliminates Noise And Vibration.
- Details, Specifications And Engineering Data About Complete Line of "Bear" Industrial Dy-Namic Balancing Machines.

6477

"BEAR" STATIC AND *DY-NAMIC BALANCING* MACHINES

▲ For more details circle NED-5704 on enclosed inquiry slip ▲



CHECK THESE FLEXLOC FEATURES

- one-piece, all-metal construction
- resilient locking sections
- controlled locking torques
- lock and stop nut in one
- not affected by temperatures to 550°F.
- can be used repeatedly
- every thread carries its share of load

Write for descriptive literature and samples. We'll be glad to supply you with a quantity for test purposes, although the Government has pre-empted almost all of our output. STANDARD PRESSED STEEL Co., Jenkintown 24, Pennsylvania.

FLEXLOC LOCKNUT DIVISION — SPS — JENKINTOWN PENNSYLVANIA

▲ For more details circle NED-5705 on enclosed inquiry slip ▲

TEMPILSTIKS°

the amazing Crayons that tell temperatures

in WELDING, FLAME-CUTTING, TEMPERING, FORGING, CASTING, MOLDING, DRAWING, STRAIGHTENING, HEAT-TREATING, IN GENERAL

$2 each — gives up to 2000 readings

it's this simple:

- Select the Tempilstik° for your working temperature.
- Mark your workpiece with it.
- The Tempilstik° will leave a liquid mark as soon as its specified temperature is reached.

Available in these temperatures (°F)

113	213	313	450	850	1250	1650
125	225	325	500	900	1300	1700
138	238	338	550	950	1350	1750
150	250	350	600	1000	1400	1800
163	263	363	650	1050	1450	1850
175	275	375	700	1100	1500	1900
188	288	388	750	1150	1550	1950
200	300	400	800	1200	1600	2000

Also available in pellet and liquid form.

TEMPIL CORPORATION
132 W. 22nd St., New York 11, N. Y.

FREE—Tempil° "Basic Guide to Ferrous Metallurgy" —16¼" by 21" plastic-laminated wall chart in color. Send for sample pellets, stating temperature of interest to you.

NAME _____
COMPANY _____
ADDRESS _____

▲ For more details circle NED-5706 on enclosed inquiry slip ▲

There's not a spot on Multigrip
Where dirt and grease can hide;
Just grab the hose, a brush or mop
And swish it all aside!

U·S·S
multigrip
USS **FLOOR PLATE**

UNITED STATES STEEL COMPANY, PITTSBURGH
COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO
TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA.
UNITED STATES STEEL SUPPLY DIVISION, CHICAGO
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

Sold by leading distributors from coast to coast 2-404

UNITED STATES STEEL

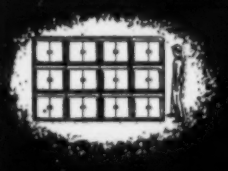
▲ For more details circle NED-5707 on enclosed inquiry slip ▲

GRIEVE-HENDRY PORTABLE ELECTRIC OVENS...

Standard Models For Every Special Need!

Model CR-1
10 cu. ft. capacity—30" wide x 25" deep x 24" high. Removable shelves and drip pan. $79.50
f.o.b. Chicago

Portable. Costs less than 5c per hour to operate. Adjustable temperature control to 225° F. Fan driven forced air circulation. Uniform temperature throughout. Plugs into any 110V wall outlet—no special wiring required.



Can be used in a group or bank. Use them on the production line —save handling—hauling.

Other standard models with temperature ranges to 1000°F. available. Write for literature.

GRIEVE-HENDRY CO., INC.

1647 W. HADDON STREET CHICAGO 22, ILL.

▲ For more details circle NED-5708 on enclosed inquiry slip ▲

FRENCH & HECHT DIVISION
KELSEY-HAYES WHEEL COMPANY
DAVENPORT, IOWA, U. S. A.

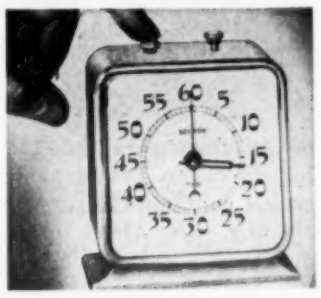
▲ For more details circle NED-5709 on enclosed inquiry slip ▲

HEAVY DUTY TORCH
can produce 20-in. blast flame

Designed for heavy duty jobs in hard-to-get-at locations, No. 336P Torchmaster Bazooka has flame range from soft lapping flame of 5 in. length and 1-in. diameter to hard blast flame 20 in. long with 5-in. diameter. Torch weighs 2½ lb complete with 12-in. hose assembly, and pistol grip handle adjusts close to or away from burner. Unit operates from standard liquid petroleum gas (Butane-Propane) cylinders at tank pressure with no regulator required. It is practical for preheating, annealing, rebabbitting bearing, cable soldering, copper sweat fitting, paint burning and other operations requiring lightweight and flexible, yet heavy duty torch. Made by **Industrial Engineered Products Co.,** Dept. NE, 7416 Melrose Ave., Los Angeles 46, Calif.

▲ For more details circle NED-5710 on enclosed inquiry slip ▲

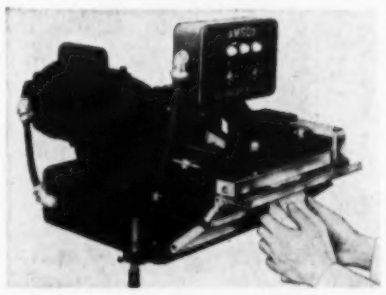
STOP-CLOCK
records time in second intervals



Featuring stopwatch accuracy with visibility of household clock, the Secron Timer stop-clock has 36-hour movement, times in 1-second increments and is controlled by two top buttons; green for start, red for stop. Reset knob is on back. Clear black-on-white dial is marked in seconds and large sweep hand permits estimations to half seconds. Smaller integrating hand registers total time elapsed up to 60 minutes. Case size is 4 x 4½ in. Made by **Precision Scientific Co.,** 3735 W. Cortland St., Chicago 47, Ill.

▲ For more details circle NED-5711 on enclosed inquiry slip ▲

JAW SEALING MACHINE
is automatically controlled



Heat, pressure and dwell time in this high speed automatic jaw sealing machine are controlled automatically. Cartridge type hermetically sealed heating elements in both jaws achieve maximum heat penetration to inner surfaces. Heat is adjusted by thermostat. An automatic folding bar guides the bag tops between the jaws for either straight sealing or folding and sealing, thus increasing production and preventing spilling. Crimp, flat or flat with horizontal bead sealing surfaces are available. Standard sealing surface dimension is 1 x 12 in. Made by **Amsco Packaging Machinery, Inc.,** 31-31A 48th Ave., Long Island City 1, N. Y.

▲ For more details circle NED-5712 on enclosed inquiry slip ▲

VARIABLE SPEED DRIVE
has interchangeable mounting size

This variable speed drive, which is available with mounting dimensions that are interchangeable with NEMA standard motors, consists of variable speed transmission with positively adjusted pulleys and an induction motor built in single compact unit. Drive is designed to save cost of building special bases where interchangeability is required. It is available in 1 to 3 hp single phase models, in polyphase models of from 1 to 15 hp with 2:1, 3:1 or 4:1 speed variation and in dripproof, splashproof and totally enclosed designs. Made by **Sterling Electric Motors, Inc.,** Dept. NED, 5401 Anaheim-Telegraph Rd., Los Angeles 22, Calif.

▲ For more details circle NED-5713 on enclosed inquiry slip ▲

AIR-POWERED

Controlled Volume Pumps

GET YOUR FREE COPY!

This new 16 page illustrated bulletin is your guide to better precision pumping! Bulletin No. 351 describes Milton Roy precision-engineered Air-Powered Controlled Volume Pumps—built to meter practically any liquid in volumes as low as 0.12 cc per full stroke to 450 gallons per hour, against pressures up to 25,000 psi. Graphic schematics of pump air controls; air consumption and capacity-pressure tables; process-proved automatic chemical feed systems—these are some of the dramatic elements of this book. For your free copy of Bulletin No. 351, write today.

MILTON ROY COMPANY
1304 E. MERMAID LANE • PHILADELPHIA 18, PA.

▲ For more details circle NED-5714 on enclosed inquiry slip ▲

FOR PHENOMENAL SAVINGS IN PLANT LAYOUT

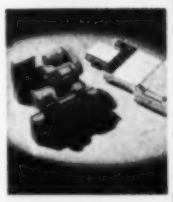
TEMPLATE BLUE PRINTS

FROM LAYOUT TO BLUEPRINT WITH NO DRAFTING

TemPrints are outline prints on transparent film, reproducing to exact scale the standard machines in your plant or made to engineering specifications of your particular equipment . . . TemPrints are also supplied for walls, partitions, windows, office furniture and shipping equipment.
TemPrint Grids are transparent sheets cross-lined to ⅛" or ¼" scale suitable for layout and floor plans.
When TemPrints are cutout and applied to the grids, the result is an accurate layout of your plant or office. Any number of duplicate prints accurately reproduced in the same size may then be made by processing through an Ozalid machine.

SIMPLY MAKE THE LAYOUT — AND THE LAYOUT WILL MAKE YOUR PRINTS
TEMPRINTS PUT THE PLAN INTO YOUR PLANT

MARINE SCALE INDUSTRIAL MODELS



Marine has specialized in scale models for many years. Marine Miniatures are accurate reproductions to scale of well-known plant machinery and equipment. All models are dimensionally accurate — may be identified instantly. A special catalog is available on request.

SEND FOR COMPLETE ILLUSTRATED CATALOG TODAY!

HARMAN ASSOCIATES
Dept. K-3, Halesite, L. I., N. Y.

▲ For more details circle NED-5715 on enclosed inquiry slip ▲

FOR *Strictly* IMPERSONAL INSPECTION CHOOSE AMES DIAL COMPARATORS

Ames Dial Comparators make the inspection of duplicate parts an extremely simple, rapid and accurate operation. Ames Comparators are strictly impersonal in their accuracy — the results being in no way dependent on the skill or judgment of the operator. The pressure of the gauging members against the work is mechanically determined and therefore uniform.
Check the Ames Dial Comparators shown — one of them may solve a Quality Control problem for you.

Ames No. 1 is an easily adjustable bench model dial comparator that measures objects up to 2" in cross section. This comparator is designated *Ames No. 1W* when equipped with a dead-weight and contact to ASTM specifications for measuring resilient materials.

Ames No. 2 is a compact bench model dial comparator for measuring sheet metal, glass, hard rubber. *Ames No. 2W* is similar, but is furnished with dead-weights and contacts to ASTM specifications for checking textiles, plastics, sheet rubber, etc.

Ames No. 13 features flat-ground, cast-iron base of ample size for using V-blocks and locating fixtures. The No. 13 can be fitted with a fine adjustment for close setting. Adjustable bracket holds any Ames Indicator.

Ames No. 130 is designed especially for inspecting comparatively large and odd-shaped parts. For this reason, the flat-ground steel base, the adjustable indicator support, and the upright column are proportioned to the user's requirements.

Send us your Quality Control job specifications, and we will supply complete details and proposal without obligation.

Representatives in principal cities. **B. C. AMES CO.** 54 Ames Street Waltham 54, Mass.
Mfgr. of Micrometer Dial Gauges • Micrometer Dial Indicators

▲ For more details circle NED-5716 on enclosed inquiry slip ▲

MERRILL MATERIALS HANDLING DEVICES

3M-2

MERRILL BROTHERS
56-13 ARNOLD AVENUE MASPETH, N. Y.

▲ For more details circle NED-5717 on enclosed inquiry slip ▲

DIEHARD'S CASE ISN'T SO UNUSUAL AS YOU MAY THINK!

In all types of industry West representatives hear comments like "our situation is a special one" . . . "an insecticide is bound to impair the quality of our product" . . . and — stranger still — "we don't have any insect problem here!"

Vaposector was formulated for the realist who *has* an insect problem and wants to get rid of it — fast! It's fully three times as concentrated as the standard Grade AA spray . . . yet there's no danger of contamination or odor when used according to directions. Vaposector controls insects by "double penetration". When used with West spraying equipment, it becomes a "dry fog" that *penetrates* the most remote crevice . . . then *penetrates* the insect's outer covering for a permanent kill. There's no place to hide. No time to escape. A Vaposector demonstration has often revealed dead insects in numbers never thought possible — simply because they live and multiply in unseen cracks and crevices.

Vaposector gives more positive control value per gallon than any competitive product. It breaks down into such minute droplets when atomized with specially designed West equipment, that only one ounce is needed to control flying insects in 1000 cubic feet . . . only two ounces for crawling insects. Compare it with an ordinary mill spray and you'll find Vaposector is over *four times as economical in use!* West can supply Vaposector as well as special mill sprays and fumigants . . . residual and contact insecticides . . . spraying equipment — a *complete insect control program* tailored to your exact needs! For further information, write Dept. 16.

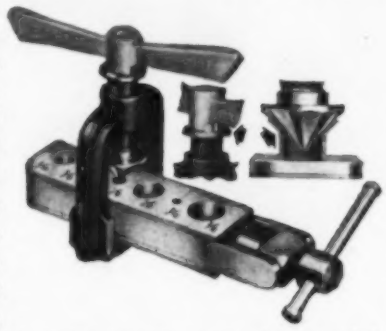
WEST DISINFECTING Company

42-16 WEST STREET, LONG ISLAND CITY 1, N. Y.

▲ For more details circle NED-5718 on enclosed inquiry slip ▲

TUBE FLARING TOOL
also burnishes face of flare

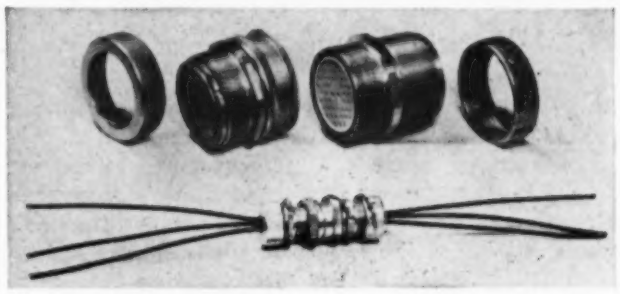
Soft copper, steel, aluminum and brass tubing can be quickly flared with No. 500-F Rol-Air flaring tool which also automatically burnishes face of flare after it has been formed. Tool will make 45-degree flares on 3/16, ¼, 5/16, ⅜, ½ and ⅝-in. OD tubing for standard SAE flared fitting joints. A lost-motion mechanism in the yoke which disengages feed during first revolution when backing off the cone causes cone to burnish flare to high polish. Hardened steel, chrome finished cone is multifaced type. Flare is formed above flaring bar instead of against bevel in bar to assure original wall thickness of tubing at base of flare. Made by **Imperial Brass Mfg. Co.,** 510 S. Racine Ave., Chicago 7, Ill.



▲ For more details circle NED-5719 on enclosed inquiry slip ▲

ELECTRICAL CONNECTOR
resists corrosion, vibration, heat

Designed to perform any standard connector task on all electrical equipment, Titeflex connector plugs and mating receptacles are designed to resist corrosion,



vibration and temperature extremes. Small and short, they permit quick, easy changes in wiring. Basic design permits their use in AN applications. They are available in 17 shell sizes conforming to AN sizes 8-36, and can be furnished for cord connections, shielded assemblies, and bulkhead or box mountings. Made by **Titeflex, Inc.,** 548 Frelinghuysen Ave., Newark 5, N. J.

▲ For more details circle NED-5720 on enclosed inquiry slip ▲

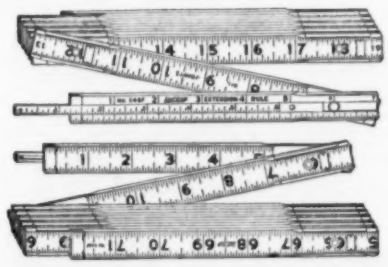
LOCKING ELECTRIC PLUG
for heavy duty appliance service

Approved by Underwriters' Laboratories for 20-amp 250-v service, Cor-Lok heavy duty locking plug is waterproof and shock resistant because of molded rubber joint to conductor. Simple twist locks or unlocks plug in outlet. It is available in 18-3, 16-3, 14-3 and 12-3 flexible cord sizes. Made by **Cornish Wire Co.,** 50 Church St., New York 7, N. Y.

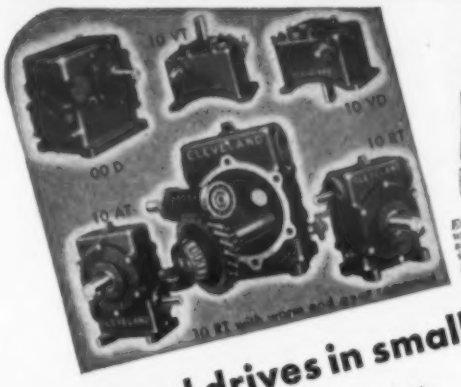
▲ For more details circle NED-5721 on enclosed inquiry slip ▲

EXTENSION RULE
has double locking spring joints

Accurate inside, outside, regular and flat reading measurements can be made with the X-46F Red End extension rule which is made of heavy select hardwood and finished with clear plastic coating. Both edges of both sides of rule are graduated in consecutive inches to 16ths. Numbering begins at extension end so that rule lies close to work even when partly open. Brass extension slide held by stops allows inside measuring up to 78 in. Bold figures are easy to read. Brass strike plates prevent wear, and riveted end caps are flush inlaid. Double locking spring joints are set into rule to maintain accuracy. Folded length is 8 in. Made by **Lufkin Rule Co.,** Hess St., Saginaw, Mich.



▲ For more details circle NED-5722 on enclosed inquiry slip ▲



Every small worm gear unit is built to precision standards—as outstanding in quality and performance as larger size Cleveland reducers.

Cleveland drives in smaller sizes

When you want a quiet, powerful, dependable drive for a small machine, choose a Cleveland Worm Gear Speed Reducer.

1. It is compact and inherently quiet, transmitting power with smooth, uninterrupted flow.
2. Its right-angled design saves valuable space.
3. It has a minimum of moving parts.
4. Shock load resistance and other factors of safety are high.
5. Rate of wear of case hardened steel worm on nickel-bronze gear is low, insuring long life.

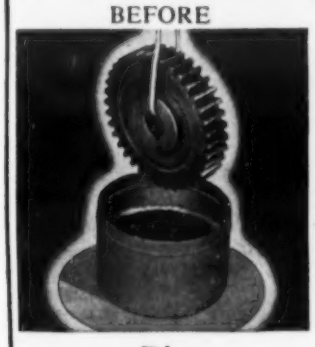
Write for Bulletin 114F on smaller size Clevelands—available now. The Cleveland Worm and Gear Co., 3283 E. 80th St., Cleveland 4, Ohio.

CLEVELAND Worm Gear Speed Reducers

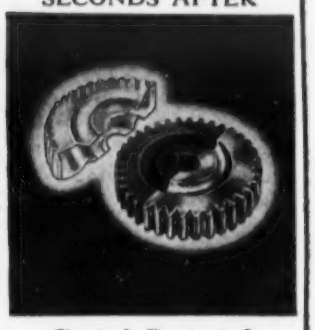
▲ For more details circle NED-5723 on enclosed inquiry slip ▲

HOT MELT PLASTIC COATINGS
for GEARS • TOOLS • PRECISION PARTS

BEFORE SECONDS AFTER



Dip

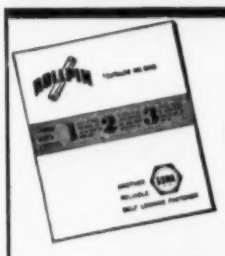


Coated • Protected

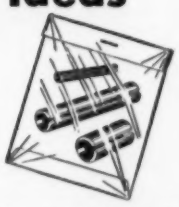
DIP-PAK Protect vital, expensive tools, gears, and machined parts during storage and shipping with Fidelity's durable, transparent plastic coatings. Merely melt coating briquette, dip parts, cool. Lasts indefinitely. Tough; abrasive, moisture, rust resistant. To remove, slit, peel. Re-melt, re-use coating. Economical, practical, rapid. Protect parts; save money.

Write for Bulletins and Free Samples
Fidelity Chemical Products Corp.
476 Frelinghuysen Avenue, Newark 5, N. J.

▲ For more details circle NED-5724 on enclosed inquiry slip ▲



FREE
Fastening Ideas
New Rollpin Bulletin
and sample Rollpins



For details on Rollpins, the self-locking, vibration-proof fasteners . . . for many new applications that will suggest ways of saving time and cutting costs in your own fastening—write today for the new Rollpin bulletin. You'll find it the most helpful and comprehensive literature ever offered on Rollpins.

We'll include a sample package of Rollpins—and we urge you to use them, try them and test them. Only then will you appreciate the design flexibility that permits Rollpins to save on almost any production line.

Rollpins are pressed-fit pins with chamfered ends. Simply driven into standard drilled holes, they lock permanently in place, exerting constant pressure against the hole walls. They are easily removed with a pin punch, and can be used again and again. Among their many money-saving applications are pinning gears, pulleys, levers and knobs, serving as locating dowels, stop pins, and as replacements for cotters, set screws or rivets. Write Elastic Stop Nut Corp. of America, 2330 Vauxhall Road, Union, New Jersey, Dept. R5-637.

ROLLPIN ELASTIC STOP NUT CORP. OF AMERICA

▲ For more details circle NED-5725 on enclosed inquiry slip ▲

Roll flexible Floorsteel out like a rug over your present floor . . . fill its rugged steel grid with concrete or mastic . . . and you have a solid, level, enduring "path" that the heaviest loads roll over, *easier*. Cracks, ruts and potholes will never snag your truck wheels again! Floorsteel stays smooth, quiet and non-skid, for loads rest on its exposed steel edges—not on the concrete. Easy to lay, maintenance-free. Send for our informative, illustrated bulletin *today!*

Ask about Klemp Hexteel heavy-duty surface armor.

KLEMP METAL GRATING CORP.
Steel Flooring Specialists
6611 SO. MELVINA AVENUE • CHICAGO 38, ILLINOIS

We Tread the World with Safety

▲ For more details circle **NED-5726** on enclosed inquiry slip ▲

TAYLOR VULCANIZED FIBRE

The Answer to Your Parts Problem ?

Easy machineability, toughness, great mechanical and high dielectric strength are reasons why Taylor Vulcanized Fibre is used in these parts. Your parts or products can enjoy these advantages, so why not explore the possibilities of using this versatile material *now?* Taylor Vulcanized Fibre is available in a wide range of sheets, rods, strips, rolls and other forms . . . in many colors, weights, grades and sizes. Write for complete information. Ask, too, about Taylor Phenol, Melamine, Silicone and Combination Laminates, and our modern fabricating facilities for producing precision-made parts tailored to your specifications.

SINCE 1901 Taylor LAMINATED PLASTICS

TAYLOR FIBRE CO.
NORRISTOWN, PA. • LA VERNE, CALIF.
VULCANIZED FIBRE • TAYLOR INSULATION
PHENOL, SILICONE & MELAMINE LAMINATES
FABRICATED PARTS

▲ For more details circle **NED-5727** on enclosed inquiry slip ▲

IF YOU USE CHAIN HOISTS
Here's NEW Information On How To...

Reduce Hoist Maintenance!
Get Maximum Lifting Power!
Select the Right Hoist!
Choose Proper Mountings!

GET THIS INFORMATION NOW!

Complete with photos, charts and tables, this 36-page booklet gives you practical engineering data to cut costs through more efficient materials handling. It gives you rated capacities, efficiency comparisons, mounting information, etc. It's yours at absolutely no obligation!

READING HOISTS & CRANES
(Reading Crane & Hoist Corp.)
2105 Adams St., Reading, Pa.

Please send us your new Chain Hoist Catalog No. 61. I understand there is no obligation.

NAME _____ TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

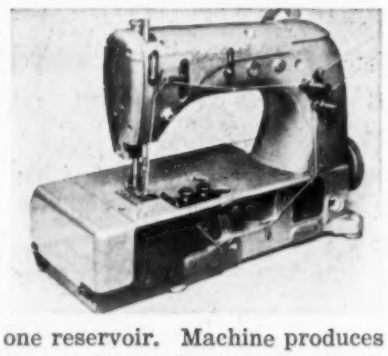
▲ For more details circle **NED-5728** on enclosed inquiry slip ▲

SPIRAL ESCAPE CHUTE
also protects user from smoke, gases

A fast, safe and sure means of escape for workers and personnel in case of fire, explosion or panic is provided by this spiral and tubular slide escape. Chutes will give egress to three times as many people as will a typical enclosed stairway and, being enclosed, are free from smoke, gases and other hazards. Escapes can be installed on outside of old buildings or on inside of new constructions. One of the main features is that chutes provide protection during descent which in itself can be extremely hazardous. Made by **Potter Fire Escape Co.,** Dept. ND, 6110 N. California Ave., Chicago 45, Ill.

▲ For more details circle **NED-5729** on enclosed inquiry slip ▲

BAG SEAMING MACHINE
has 3½ to 7 per inch stitch range



Among improvements incorporated in this style 51100 BP flat bed single-needle machine for seaming large and medium size bags made from medium or heavy materials is automatic lubrication which requires filling of only one reservoir. Machine produces stitch type 401 in range of 3½ to 7 per inch. Anti-friction bearings in the feed lift, looper avoid and feed drive permit high speed as well as smooth operation. Main bearings are seize-resistant to prevent freezing. Precise adjustment for applying pressure directly to pressure foot is provided by coiled spring at top of machine instead of cantilever type presser spring. Smooth taupe finish does not fatigue the eye and is easy to clean. Made by **Union Special Machine Co.,** 416 N. Franklin St., Chicago 10, Ill.

▲ For more details circle **NED-5730** on enclosed inquiry slip ▲

VERTICAL PULL ADAPTOR
for vertical mounted Levolier switch

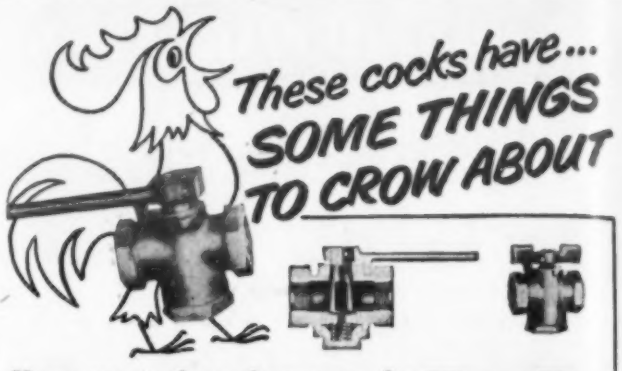
Universal-lever action of Levolier switches mounted vertically can now be utilized by installation of No. 84 vertical pull adaptor. Adapter converts straight down pull of switch to usual file action horizontal pull. It is designed for straight down mounting of switches and can be concealed easily behind louvers or fluorescent tubes. Adaptor consists of short extension arm which snaps over the switch lever and slotted guide arm to maintain alignment. Made by **McGill Mfg. Co.,** 1250 N. Lafayette St., Valparaiso, Ind.

▲ For more details circle **NED-5731** on enclosed inquiry slip ▲

SHOP CARTS
caster equipped, with three shelves

Service carts for handling a variety of products in factory, stockroom and shipping room are 31 in. high, including casters. Shelves are of 14-gage steel with a 2-in. flange, and legs are 1¼ x 1¼ x 1/8-in. angle iron. Each shelf is attached to legs by 16 bolts. Bottom shelf is turned up, but others are reversible. Two rigid and two swivel 5-in. casters can be rubber or steel. Baked green finished unit is shipped knocked down. Made by **Bay Metal Products,** 3009 N. Sixteenth St., Philadelphia 32, Pa.

▲ For more details circle **NED-5732** on enclosed inquiry slip ▲



Users report three—four—even five times the service life from Westinghouse Savair Cocks. Bothersome leaks and expensive down-time losses are eliminated.

SAVAIR® COCKS are . . .

1. Designed for long life.
2. Manufactured from high quality metals.
3. Rugged in construction.
4. Proved in long years of service.
5. Economical in over-all cost.
6. ¼" to 2", with or without side vent to vent the discharge side when cock is closed.

To get these savings in your plant—make Savair Cocks a standard specification. Catalog on request.

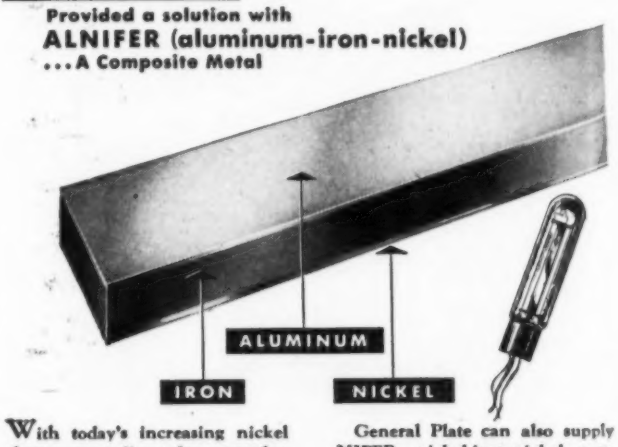
WESTINGHOUSE
AIR BRAKE COMPANY
WILMERDING, PENNA.
INDUSTRIAL PRODUCTS DIVISION

Factory Branch: Emeryville, Calif. Distributors throughout the United States . . . Consult your Classified Directory. Distributed in Canada by: Canadian Westinghouse Co., Ltd., Hamilton, Ontario.

▲ For more details circle **NED-5733** on enclosed inquiry slip ▲

PROBLEM:
How to replace the use of pure nickel in close-spaced tubes

GENERAL PLATE
Provided a solution with
ALNIFER (aluminum-iron-nickel)
...A Composite Metal



With today's increasing nickel shortages, radio tube manufacturers are faced with a problem of how to extend their nickel allotment.

General Plate has already made available ALFER, iron clad with aluminum on both sides . . . a composite metal which is used in receiving tube parts. However, the use of this composite metal is not satisfactory for certain tube types which have closely spaced parts.

General Plate engineers solved this problem with ALNIFER, iron clad with aluminum on one side and nickel on the other.

General Plate can also supply NIFER, nickel-iron-nickel composite metal, for use where other materials are not satisfactory.

No matter what your problem, it will pay you to consult with General Plate. Their vast experience in cladding precious to base metals, or base to base metals can overcome your problems . . . often reduce costs.

GENERAL PLATE
Division of Metals & Controls Corp.
86 Forest St., Attleboro, Mass.

▲ For more details circle **NED-5734** on enclosed inquiry slip ▲

Is space restricting your RIGHT ANGLE drive selection?

Perhaps the compact design of ANGLgears—they fit into the palm of your hand—will solve your problem. These standardized, right angle, bevel gear drives meet most industrial requirements. ANGLgears are rated at ⅓ hp or 1 hp at 1800 rpm. Both models are supplied with 2 or 3-way extensions, have antifriction bearings and hardened gears, and are lubricated for life. Write for literature, and the name and address of your nearest ANGLgear distributor.

ANGLgears are sold exclusively through industrial distributors.

AIRBORNE
ACCESSORIES CORPORATION
1414 Chestnut Avenue, Hillside 5, New Jersey

©A.A.C.

▲ For more details circle **NED-5735** on enclosed inquiry slip ▲

CHROMALOX Tubular Heaters operate immersed in liquids, soft metals and molten salts. Exclusive triangular shape can be clamped to metal surfaces and installed in machined grooves to heat platens and dies. Tubular Units are used for radiant and convection heat in ovens and other high temperature equipment. Or, for applications such as plastics molds, cylinders, nozzles, etc., they can be cast into aluminum and iron to your specifications. Sheathed in steel, alloy or copper. Straight lengths or curved to fit your requirements.

WRITE TODAY FOR CATALOG 50 which shows Chromalox Tubular Heaters and the complete line of other industrial heaters for every use.

EDWIN L. WIEGAND CO., 7509 THOMAS BOULEVARD, PITTSBURGH 8, PA.

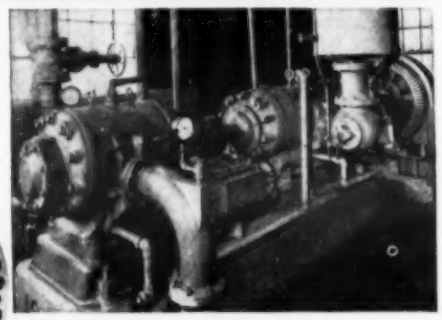
See other advertisements on pages 4 and 14.

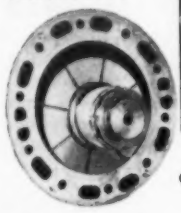
CHROMALOX

ELECTRIC HEAT FOR MODERN INDUSTRY

▲ For more details circle NED-5736 on enclosed inquiry slip ▲

SOUND LUNGS FOR INDUSTRY





Forging plant: Two-stage rotary compressor. Capacity 1665 c.f.m., 100-lb. pressure.

FULLER Rotary Compressors

Fuller Rotary Compressors are first choice for dependability in many plants. That's only natural, because Fuller engineers and builds for trouble-free, long-term, low-cost operation. They have few moving parts . . . need little attention and infrequent inspection. Maintenance is low . . . there are no valves to leak or seats to grind; blades automatically compensate for wear. *Full capacity is maintained for the life of the machine.*

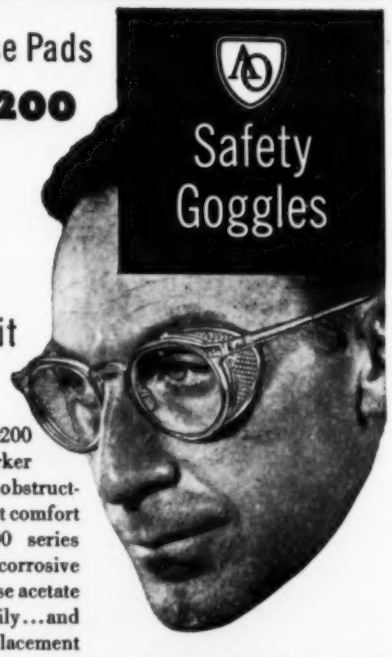
We'll be glad to show you how Fuller Rotaries can go on your payroll at the minimum wage. Get in touch with us . . . or write for Bulletin C-5.

C-211

FULLER COMPANY, Catasauqua, Pa.
120 S. LaSalle St., Chicago 3—420 Chancery Bldg., San Francisco 4

▲ For more details circle NED-5737 on enclosed inquiry slip ▲

Adjustable Nose Pads of AO FX9200 GOGGLE Make it Easy to Fit the Hard to Fit



With the new AO FX9200 goggle, the hard-to-fit worker can enjoy the safety, unobstructed vision and lightweight comfort which the AO FX9200 series goggle provides. Non-corrosive nose pads of thin cellulose acetate adjust for perfect fit easily...and remove for quick replacement just as easily. "Rocking" nose pad construction distributes goggle weight broadly for pressure-free comfort. The FX9200 is particularly recommended with prescription Super Armorplate lenses, with or without side shields. Your nearest AO Safety Products Representative can supply you.

American Optical
SAFETY PRODUCTS DIVISION

SOUTHBRIDGE, MASS. • BRANCHES IN PRINCIPAL CITIES

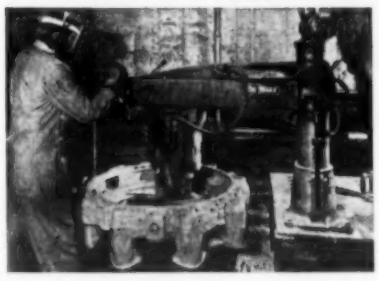
▲ For more details circle NED-5738 on enclosed inquiry slip ▲

ROTARY SWITCHES for pulse work and telemetering

The printed circuit technique is now being applied to special rotary switches for pulse work and telemetering. Method makes odd-shaped segments and very irregular timing intervals practicable on rotary switch for either high or low speed applications. Almost any number of contacts can be spaced around periphery of contact panel at irregular intervals, depending on timing required. Either shorting or nonshorting switch action can be obtained, and almost any type metal can be applied to wide variety of phenolic base materials. Life expectancy of switches exceeds 1 million revolutions. Made by **Daven Co.**, Dept. NED, 191 Central Ave., Newark 4, N. J.

▲ For more details circle NED-5739 on enclosed inquiry slip ▲

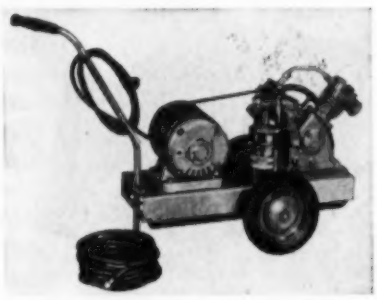
METAL CUTTING MACHINES for use in foundry and other shops



Cutting risers up to 4 in. diameter on iron castings and 2-in. on nickel and steel castings are among uses for model ME-2F 10-hp foundry sprue cutting machine (illustrated), one of series of metal cutting machines. Companion ME-6 15-hp dual column cutting machine can cut 2-in. thick, 96-in. wide stainless steel plate in one application. Billets, heavy tubing and various sections can be accommodated by model ME-1 10-hp cutoff machine. Other machines range from ½ to 10 hp for cutting plastics, nonferrous metals and other materials that do not require additional power and capacity of the heavier equipment. Made by **DeWalt Inc.**, Dept. P-108, 201 Martha Ave., Lancaster, Pa.

▲ For more details circle NED-5740 on enclosed inquiry slip ▲

PORTABLE AIR COMPRESSORS deliver 1.5 to 3.5 cfm at 100 psi



Single and two-cylinder models make up PC series of portable industrial air compressors having air delivery ranges from 1.5 to 3.5 cfm at 100 psi. Powered by 1/3, ½, ¾ or 1-hp electric motors, or by 1½-hp gasoline engine, units have unlimited use in paint spraying, operation of small air tools, pressure greasing or refinishing. Operation is automatic with constant speed unloader. Ball bearing compressor is mounted on semipneumatic tired truck with air storage tank mounted below. Tank has check valve, air regulator, gages and safety valve. Made by **Electric Sprayit Co.**, 1415-1425 Illinois Ave., Sheboygan, Wis.

▲ For more details circle NED-5741 on enclosed inquiry slip ▲

DIAL BORE GAGE accurately checks small diameters

Designed to check tolerances up to 0.005-in., model No. 00 dial bore gage will inspect bores ranging from 0.250 to 0.375-in. Gage utilizes interchangeable "centering-size" disks which attach to instrument head and are locked in place by knurled clamping nut. Disks are a few thousandths of an inch smaller than bore to be gaged and are changed for dimension changes. The dial indicator, hooded for protection against accidental knocks, has high visibility graduations of 0.0001-in. The indicator-actuating plunger is sapphire-tipped and disks are chromium plated. Operation is by entering gage at an angle, then rocking to find square position while minimum reading is noted on the indicator. Made by **Standard Gage Co.**, 200 Parker Ave., Poughkeepsie, N. Y.

▲ For more details circle NED-5742 on enclosed inquiry slip ▲

and a "right" fastener...

You wouldn't intentionally slow down your production lines with inefficient tools or use the wrong machine for the job at hand. Isn't it equally logical to make sure that every fastening job is done with a fastener that is "just right"?

Differences in hardness and thickness of the tapped material require selection of the right type of tapping screw thread. This, in turn, works best with selection of the right hole size.

Lamson fastener engineers can advise you how to reduce the variety of fasteners and sizes at each assembly station, cut costs and improve assembly. Lamson control of quality and Lamson design produce low drive torques—high strip torques. Solve your fastening problems with Lamson Tapping Screws.

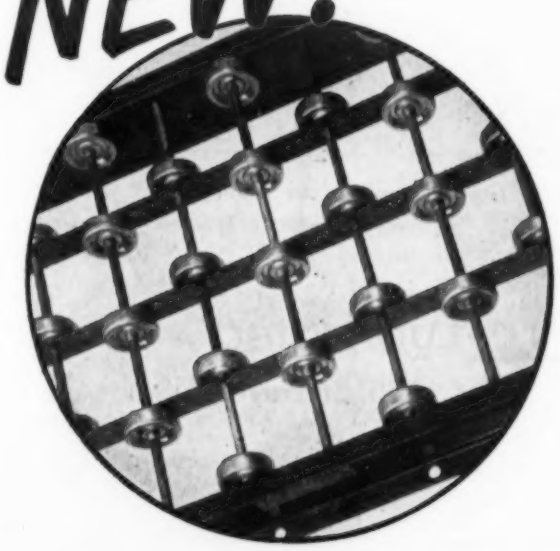
...specify Lamson tapping screws

Lamson & Sessions

The LAMSON & SESSIONS Co.
1971 West 85th St. • Cleveland 2, Ohio
CLEVELAND and KENT, OHIO • BIRMINGHAM • CHICAGO

▲ For more details circle NED-5743 on enclosed inquiry slip ▲

NEW!



INDUSTRIAL Rapid-Wheel*
GRAVITY CONVEYOR

Moving tote boxes? Heavy cartons? Palletized parts? With Rapistan's new Industrial Rapid-Wheel you now get roller conveyor capacity at wheel conveyor cost. New strategic arrangement of additional steel center bands gives extra-rigid support for every conveyor wheel . . . extra-deep channel frame (3½") raises capacity to 400 lbs. per foot! You get non-skid "wheel action" on turns, smoother flow with less pitch, and longer economical gravity runs.

Rapistan's new Industrial Rapid-Wheel is available in 5' or 10' sections . . . 12" or 18" channel widths. It's a real cost-cutter.

*T.M.

For answers to your conveying problems *send today for prices, specifications, and full information on Rapistan's new low-cost Industrial Rapid-Wheel. To meet special needs, Rapid-Wheel modifications are available at mass-production prices. Write today.*

The RAPIDS-STANDARD CO., Inc.
758 Rapistan Bldg., Grand Rapids, Michigan

Rapistan®
BETTER CONVEYING EQUIPMENT

Representatives in Principal Cities

CONVEYORS • INDUSTRIAL CASTERS • WHEEL-EZY® TRUCKS

▲ For more details circle NED-5744 on enclosed inquiry slip ▲

3 reasons

FOR INSISTING ON A-C WELDERS

Few welders available today give you all the features you will find combined in the new line of M&T a-c transformers. These features are:

1 Low open circuit voltage *with* arc stabilization—for greater safety and for a really stable arc free from "pop-outs."

2 Silicone insulation—the greatest contribution to welder design in years—stands up against higher temperatures—moisture resistant—proof against chemical fumes—permits more overloading—assures longer welder life.

3 *Automatic* "hot-start"—provides just the right amount of surge for easy arc starting at any current setting *without* manual adjustment of controls.

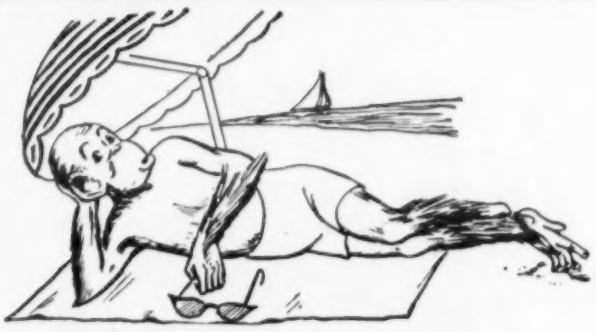
More sound reasons for using M&T A-C Welders are in the M&T bulletin giving operating data. Write for your copy.

Contact your local distributor or nearest M&T office.

METAL & THERMIT CORPORATION

100 EAST 42nd STREET • NEW YORK 17, N. Y.

▲ For more details circle NED-5745 on enclosed inquiry slip ▲



Grease Monkeys are loafing —since Transall took over

Pre-Lubricated

Belt Conveyor Idlers

No Lubrication Labor
No Lubricant Cost

TRANSALL INC.

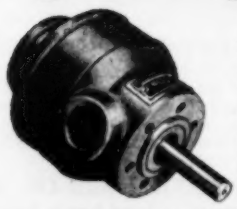
Manufacturers of a complete line of Belt Conveyor Equipment

119 North 11th St. Birmingham 4, Ala.

▲ For more details circle NED-5746 on enclosed inquiry slip ▲

GEROTOR*

hydraulic pumps* *



* Pronounced Jer-rotor.

* * Pronounced outstanding in design and performance. Heart of each hydraulic pump is the patented Gerotor mechanism, both elements of which revolve in the same direction at low relative speed. This results in longer life, less slippage, less wear, a smoother and more uniform flow. In your plant or in your product—in any hydraulic circuit—a Gerotor pump means higher efficiency at lower operating cost.

GEROTOR MAY CORPORATION, BALTIMORE 3, MD.

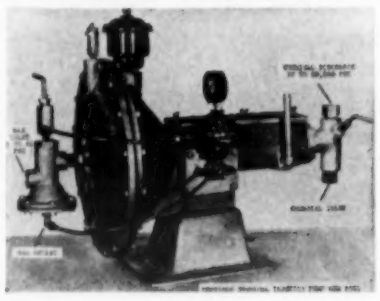
▲ For more details circle NED-5747 on enclosed inquiry slip ▲

MINIATURE DELAY RELAYS for 2 to 90 second delays

Hermetically sealed delay relays which withstand vibration and are not affected by altitude or climatic conditions are available in T6-½ bulb-base 9-pin miniature size. Tubes are made in delay times of 2 to 90 seconds and can be supplied for all standard heater voltages, such as 6.3, 26 and 115 v. Wattage consumed by heater is approximately 2 w and contact rating is 115 v 2 amp noninductive ac. Ambient is compensated for temperatures from −50 to 70° C. Made by **Amperite Co.,** Dept. NE, 561 Broadway, New York 12, N. Y.

▲ For more details circle NED-5748 on enclosed inquiry slip ▲

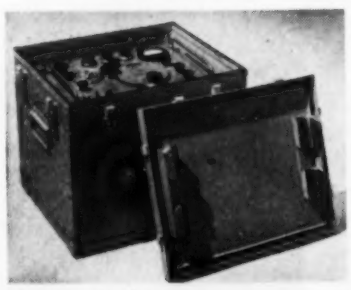
CHEMICAL INJECTOR PUMP output pressure up to 20,000 psi



Model MSM 5001 chemical pump can inject a liquid chemical into another liquid against 20,000 psi pressure. Fifty pound feed pressure of air, gas, water or steam produces up to 20,000 psi discharged pressure. Feed pressure can be adjusted from 5 to 50 lb and volume can be set to deliver ½-pint to 360 gallons per 24 hours. The 62-lb pump has ¼ or ½-in. Stellite pistons and valves for high pressure or 1-in. stainless steel pistons and valves for lower pressures. Mechanical parts operate in an oil bath. Suction has a combination sight feed strainer-cutoff, while discharge chamber has bleedoff for priming and sample catching. Made by **Texsteam Corp.,** Dept. 26, 320 Hughes St., Houston 11, Tex.

▲ For more details circle NED-5749 on enclosed inquiry slip ▲

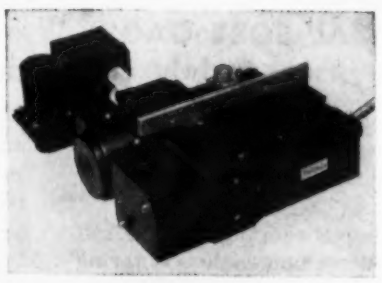
INSTRUMENT CASES tailored to fit specific models



Wide range of sizes, styles and materials is available in line of carrying cases tailored to fit specific instruments. Illustration shows Plymetal case. Waterproof types conforming to JAN specifications can be supplied. Cases are made in any reasonable dimensions with various types of cover fasteners, shock mounts, hinges, carrying handles, cover-holding chains, etc. Corners and edges are double reinforced and construction is riveted and/or welded. Made by **Engineered Instruments, Inc.,** Hayward 28, Calif.

▲ For more details circle NED-5750 on enclosed inquiry slip ▲

LIGHT COMPARATOR is measuring and control instrument



Applicable to automatic process control by means of light measurement, Colorede light comparator consists of sealed "building block" units, arranged to provide combinations to fit particular measuring purposes. Electronic, photocell, flicker and servo-slit units are used in most standard applications. The beam-splitter and illuminator units can be incorporated for specific uses. System includes fail-safe devices to actuate alarm systems in case of operational failure. Instrument operates continuously for thousands of hours without zero or sensitivity drift. Made by **Instrument Development Laboratories, Inc.,** 165 Highland Ave., Needham Heights 94, Mass.

▲ For more details circle NED-5751 on enclosed inquiry slip ▲

CRANE WHEELS AND WHEEL ASSEMBLIES

INSTALL THESE WHEEL ASSEMBLIES complete with axles, bearings, drive gears, grease fittings and all necessary parts for a complete installation. There are sizes, types, and styles of mounting to suit every requirement.

DOUBLE FLANGED WHEELS range in standard tread diameters from 7½" to 24"; SINGLE FLANGED WHEELS from 4" to 8". Wheels are available unmounted or in completely assembled units.

WRITE FOR CATALOG — Complete line of Downs Crane Wheels and Assemblies are illustrated and described in new Catalog No. 3540. Specifications included. Write today!

DOWNS CRANE & HOIST CO.

MECHANICAL ENGINEERS — 540 W. VERNON AVENUE LOS ANGELES 37, CALIF.

Electric Cranes • Hand Cranes • Jib Cranes • Sheaves • Sheave Blocks • Plate Grips • Plate Hooks • Crane Trolley Hoists • Crane Wheels • Crane End Truck Units • Jib Crane Fittings • Automatic Mechanical Load Brake Crane Hook Blocks

▲ For more details circle NED-5752 on enclosed inquiry slip ▲

DEFY Oil and chemicals

The patented Double Triangle deflected nut threads make GRIPCO *Lock Nuts* lock tight onto the bolt, in spite of oil, water or chemicals. Even if they're soaked in oil, they'll still hold! GRIPCO Lock Nuts stay locked until removed with a wrench, and can be removed and reapplied again and again, without appreciable loss of locking effectiveness. GRIPCO Lock Nuts go on *fast* and stay *fast!*

Beat vibration, too On applications where vibration is a factor, follow the example of leading manufacturers and standardize on GRIPCO Lock Nuts. Their locking power is not lessened, and their tenacious grip is not loosened by vibration, tension, pressure and shearing forces.

GRIPCO LOCK NUTS

GRIPCO PILOT-PROJECTION WELD NUTS
Also *applied fast.* The pilot positions the nut quickly and accurately, and is instantly attached by resistance welding.

GRIPCO COUNTERSINK WELD NUTS
Weld Fast! The slanting "countersink" section catches loose metal particles and slides them down the slanting "countersink" surface away from the threads. No re-threading required!

GRIPCO WELD NUTS *are furnished with either lock or plain threads.*

GRIP NUT COMPANY

308G S. Michigan Ave., Chicago, Illinois

▲ For more details circle NED-5753 on enclosed inquiry slip ▲

BEVERLY THROATLESS SHEARS

MAKE CUTS LIKE THESE

QUICKLY... EASILY... ACCURATELY

18 ga. metal cut with Model B-1 Shear.

Save time, labor and material—use a Beverly to make any cut . . . straight, curved or irregular in any metal. Exclusive design allows work to be turned at any angle while cutting. Standard in the industry for years. 4 models—capacities to ⅝" mild.

See your Beverly Distributor for a demonstration. Write for FREE illustrated circular on Beverly metal cutting Shears.

MODEL B-3 with ball bearing hold down. Cap. ⅜" mild; 10 gauge stainless.

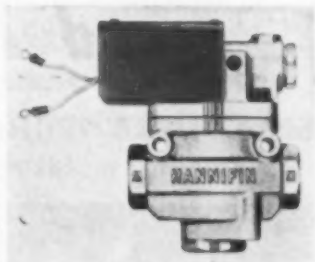
Beverly SHEAR MFG. CO.

3016 W. 111th STREET • CHICAGO 42, ILLINOIS

▲ For more details circle NED-5754 on enclosed inquiry slip ▲

▲ For more details circle NED-5755 on enclosed inquiry slip ▲

AIR CONTROL VALVE
operated either 2-way or 3-way



The main or master valve portion of the P-M Pilot-Master valve for directional control of air pressure can be operated either two or three-way, normally open or closed to pressure, without any internal change. This is facilitated by inlet and exhaust ports being interchangeable. Main valve is pressure operated, through piston-operated poppet. Only two sizes of cartridge and piston-poppet assemblies are needed to service all five main valve bodies from ⅜ through 1¼ in. size, and one size pilot head fits all five master valve sizes. On 60-cycle current valve will shift in less than 1/20-second. It can also be supplied with direct current solenoid. Made by **Hannifin Corp.**, 1128 S. Kilbourn Ave., Chicago 24, Ill.

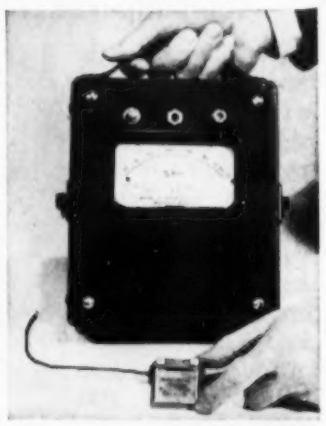
▲ For more details circle NED-5758 on enclosed inquiry slip ▲

BATTERY CHARGER
quick-charges 6 and 12-v batteries

Capacity of type QW Dual-Purpose fast charger is 100 amp for charging 6-v batteries and 80 amp for 12-v units. Two 6-v batteries can be charged simultaneously, each receiving 80 amp. Charger is also suitable for quick starting of cold engines with low batteries. By using selenium rectifier, current draw on 115-v ac line is only 15 amp at full capacity. Charger is fully protected against overloads, reversing of leads or possibility of overheating if cooling system is impeded. Cabinet is finished in red baked enamel with white porcelain enamel front panel. Unit is lightweight and compact for easy handling. Made by **McColpin-Christie Corp.**, P. O. Box 19665, Los Angeles 43, Calif.

▲ For more details circle NED-5759 on enclosed inquiry slip ▲

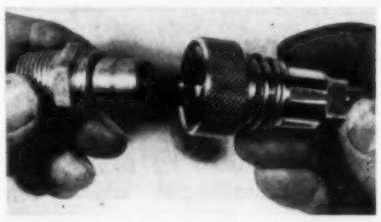
HUMIDITY CONTROLLER
designed for portable systems



Sensitive low cost H 64A humidity control is for manufacturers of portable and packaged humidifying and dehumidifying systems. Tested in a special chamber, it proved to have an operating differential of less than 5 per cent. Differential is lower when humidity is lower. Electric device uses extremely sensitive hair element. Made by **Minneapolis-Honeywell Regulator Co.**, 2950 Fourth Ave. S., Minneapolis, Minn.

▲ For more details circle NED-5760 on enclosed inquiry slip ▲

HOSE & PIPE CONNECTOR
reduces pressure drop in line



By streamlining the inner valve and employing a square cut synthetic rubber gasket, pressure drop has been considerably reduced and perfect sealing is obtained in this coupling for air, fuel, water, paint and steam hose and pipe. It can be connected and disconnected with the fingers. When disconnected, coupling is self-sealing on the socket side, but can be made self-sealing on both sides with no loss of liquid. Units for pipe size diameters from ⅛ to 1 in. are available. Coupling can withstand temperatures from minus 65 to plus 350° F. Aluminum (standard), brass, carbon steel and stainless steel are optional materials available. Made by **E. B. Wiggins Oil Tool Co.**, Dept. NED, 3424 E. Olympic Blvd., Los Angeles 23, Calif.

▲ For more details circle NED-5761 on enclosed inquiry slip ▲

IMMEDIATE SHIPMENT

STYLE 600 STACKING BOX

ALL PRICES F.O.B. FACTORY PHILADELPHIA

COMPLETE CATALOG ON REQUEST

An ideal all-purpose shop box with rigid handle and hook hole each end. Sturdy all-welded construction. Heavy skids act as positive stacking lock and reinforce box at point of maximum wear. Will stack with style 500 stacking bin of same length and width.

Product Number	Width	Length	Height	Gauge Steel	Price Plain	Price Green
601-18	10"	16"	6"	18	$1.55	$1.71
602-16	12"	18"	8"	16	$2.29	$2.58
603-18	12"	18"	6"	18	$1.84	$2.05
603-16	12"	18"	6"	16	$2.11	$2.35

PHONE • WIRE • WRITE
BAldwin 9-1805

BAY METAL PRODUCTS
3009 N. 16th St. • Phila. 32, Pa.

▲ For more details circle NED-5756 on enclosed inquiry slip ▲

take a CLOSER LOOK at...

- Seamless and Welded, Pressure and Mechanical, from one source.
- Full range of austenitic and ferritic stainless analyses.
- Sizes up to 8⅝" O.D.
- Wide choice of finishes.
- Special sizes, gauges, ends, shapes, lengths.
- Distributors in principal cities.

Write for new Technical Bulletin No. 1

THE BABCOCK & WILCOX COMPANY
TUBULAR PRODUCTS DIVISION

General Offices & Plants
Beaver Falls, Pa.—Seamless Tubing; Welded Stainless Steel Tubing.
Alliance, Ohio—Welded Carbon Steel Tubing.

▲ For more details circle NED-5757 on enclosed inquiry slip ▲

Do you have this valuable handbook?

This revised edition of the "Accurate Handbook of Technical Data on Springs" offers 40 pages of clear, concise data on such subjects as design formulation, load deflection and the proper methods of specifying springs. Also presented are several helpful short cuts for making spring calculations. Engineers and designers will find the handbook invaluable. Write for your free copy today!

ACCURATE SPRING MFG. CO.
3805 W. Lake Street Chicago 24, Illinois

Accurate Springs

▲ For more details circle NED-5762 on enclosed inquiry slip ▲

PRODUCTION UP COSTS DOWN WITH Commander PRODUCTION TOOLS

Adjustable MULTI-DRILL

- Adjustable To Any Hole Pattern
- Drill 2 to 8 Holes at 1 Stroke
- Fits Any Drill Press

MODEL 900

Increase production up to 800%—save time, cut costs. Mounted without alterations or special tools. 9" drilling area; centers to ½". Extension Spindles available to increase area to 22½". Special adaptations available.

"the tapper that thinks for its operator"

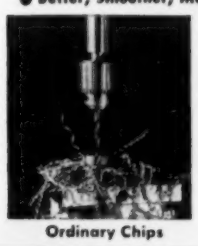
Commander TAPPER

- Wider Range . . . 1 Tapper Handles #0 to ¾" Taps
- Automatic Tap Protection
- Furnished to Fit Any Drill Press

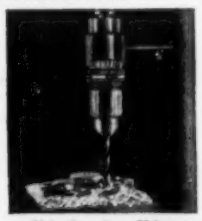
Adjustable full range torque control instantly stops any tap when it's dull, loaded, strikes a hard spot, or bottoms in blind hole tapping. Assures maximum production, cuts rejects, even with inexperienced operators.

DRILL CHIP BREAKER

- Drill SHALLOW or DEEP Holes up to 400% Faster
- Drill 10 diameters or more in depth without clearing drill
- Better, Smoother, More Accurate Holes



Ordinary Chips



Chip Breaker Chips

Write FOR CATALOG #851 and the name of your nearby Commander Distributor

Commander MFG. CO.
4220 W. KINZIE STREET
CHICAGO 24, ILLINOIS

▲ For more details circle NED-5763 on enclosed inquiry slip ▲

"Solved our marking problem!"

say users everywhere

"The *MULTISTAMP* Hand Stamp Stencil Duplicator is the best thing we've seen for shipping tag and label addressing" . . "for marking boxes, cartons, packages." Quick, clean, accurate, easy-to-use. Prints *1000* or more clear, sharp copies from *one stencil . . one inking*. Just type, write, trace or draw on low-cost stencil, snap in position and print . . like using a rubber-stamp. Non-mechanical, of non-corrosive metal. No moving parts, has replaceable ink pads. 8 complete outfits, $9.50 to $99.50. *Write for folder.*

IT PRINTS ON
POSTCARDS SHIPPING TAGS
BOXES CARTONS
LABELS PACKAGES

At Your Office or Shipping Room Supply Dealer

MULTISTAMP
STENCIL DUPLICATOR
MANUFACTURED ONLY BY THE MULTISTAMP CO. NORFOLK, VIRGINIA

▲ For more details circle **NED-5764** on enclosed inquiry slip ▲

Wire Shapes and Forms TO YOUR SPECIFICATIONS

● Your wire forms are produced fast, accurately and at low cost with Sommer mass-production methods.

Speedy, automatic plating equipment handles either large or small assemblies. Popular new Zinc Iridite process adds a bright, durable, economical finish.

Sommer offers complete forming, stamping, cut-threading and butt-welding services. Let us work with you in designing and producing any wire shapes or forms needed for your defense contracts. Send sample, blueprint or drawing—see how Sommer can save you time and money.

SOMMER METALCRAFT CORPORATION
(Formerly JESCHKE Wire and Specialty Company)
200 POSTON DRIVE
CRAWFORDSVILLE, INDIANA

▲ For more details circle **NED-5765** on enclosed inquiry slip ▲

NOELTING **Faultless** ENGINEERED **TRUCK CASTERS** CUT HANDLING COSTS

NEW! DRAWN STEEL WHEELS FOR LONGER WEAR

Faultless Casters equipped with the new Drawn Steel Wheels provide (1) *longer life*, (2) *greater efficiency*, (3) *at minimum maintenance* and, thus, (4) *lower operating cost per mile.*

Faultless Steel Wheel Casters help industry reduce overhead by maintaining fast, fluid production lines. These precision-made wheels are machined to tolerances typical of fine tools and like any quality equipment, are the best investment for long uninterrupted service. Write for Bulletin No. NE-4.

FAULTLESS CASTER CORPORATION
Dept. NE-9, Evansville 7, Indiana
Branches in Principal Cities—Canada Factory: Stratford, Ont.

▲ For more details circle **NED-5766** on enclosed inquiry slip ▲

New Processes and Materials

SPRAY-MOLD TECHNIQUE
complex molds made of sprayed metal

Metallizing or the spraying of molten metal is now being employed to produce complex molds for slush and vacuum molding processes. Metal, cloth, plastic, wood, glass or even wax master is sprayed with a layer of Spramold wire, a low melting-point metal alloy, to a thickness of approximately 0.04-in. A layer of Sprabronze AA aluminum bronze alloy is then applied to a thickness of 0.03-in. to relieve internal stresses and to give added strength. This layer is followed with another 0.04-in. of Spramold. There is no distortion of the mold because very little heat is retained by the metal particles when they strike the master. Finish of the mold cavity is dependent entirely on the finish of the master. For full details, write **Metallizing Engineering Co.,** Dept. NED, 38-14 30th St., Long Island City 1, N. Y.

▲ For more details circle **NED-5767** on enclosed inquiry slip ▲

SPIRIT DUPLICATING CARBONS
metallic coated for clean handling

Designed to insure stainproof handling, line of spirit carbons and ready-to-use master-sets feature carbon deposits locked in beneath protective metalling coating. Edges of carbon sheets are also sealed with coating. Master-sets and carbons are offered in conventional purple as well as brilliant red, blue, green and black. They are manufactured to reproduce a large number of clear copies. Complete line of impression papers for mimeograph, spirit and offset duplicating is also offered. Made by **A. B. Dick Co.,** Dept. NEW, 5700 W. Touhy Ave., Chicago 31, Ill.

▲ For more details circle **NED-5768** on enclosed inquiry slip ▲

WIRE FENCE REFINISHING
long-nap roller-coater speeds job

Refinishing of wire fences is relatively simple operation when Rust-Oleum red primer and final coat of aluminum paint are applied with a special long-nap lambs-wool roller. Roller is dipped into 5-gal container of finish material, is pulled up a flat board to remove running surplus finish and roller is applied to area to be finished. Even the barbed wire top can be coated in this way, but posts, pipe framework and supporting arms are best finished with brush after the fence has been roll-coated. For full information, write to **Rust-Oleum Corp.,** 2799 Oakton St., Evanston, Ill.

▲ For more details circle **NED-5769** on enclosed inquiry slip ▲

FOG TYPE INSECTICIDE
is odorless and tasteless

Flying or crawling insects which infest food industries, granaries, bottling and distilling plants, hospitals, farms, hotels and restaurants, where contamination by taste or odor is vitally important, can be controlled by Vaposector fog type insecticide. Available in liquid form, insecticide is transformed by appropriate spray equipment into a fine mist or fog which penetrates the smallest cracks or recesses. Chemical goes through insects outer covering to attack its central nerve and respiratory systems. One ounce will control flying insects in 1000 cu ft space while 2 oz is needed for crawling insects in same area. When used according to directions, insecticide is non-toxic to humans or warm-blooded animals. Formulated by **West Disinfecting Co.,** Dept. DE, 42-16 West St., Long Island City 1, N. Y.

▲ For more details circle **NED-5770** on enclosed inquiry slip ▲

IN WIRE-MESH PRODUCTS LET JELLIFF DO IT!

For 70 years we've been weaving Wire Mesh. And a good part of that time we have also been making things of Wire Mesh for people who find it is cheaper, easier and generally more satisfactory to "let Jelliff do it."

From big Dipping Baskets to tiny precision filters — from fuel strainers to what-is-it *gadgets — JELLIFF's Custom Production Department turns out fabricated Wire-Mesh products at speed, price and precision that mean lower costs and a stronger competitive position for our many customers.*

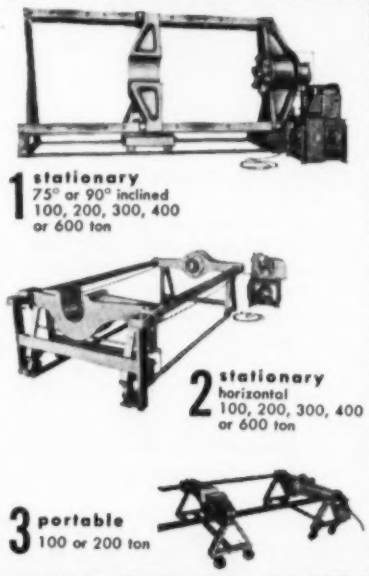
If you buy or make wire-mesh assemblies as components of your own products and have not yet had an estimate from Jelliff, write today for details. No obligation, even if you enclose a blueprint for us to figure on. Address Department 11

THE C. O. JELLIFF MFG. CORP.
DIPPING BASKETS · LEKTROMESH · RESISTANCE WIRE
WIRE MESH PARTS · WIRE CLOTH · STRAINERS • FILTERS
SOUTHPORT CONNECTICUT
WIRE PRODUCTS Jelliff SINCE 1860

▲ For more details circle **NED-5771** on enclosed inquiry slip ▲

which of these forcing presses will do your job best?

HYDRAULICS Rodgers KEEP THE WORLD MOVING



Rodgers line of versatile forcing presses have separate pumping units—choose from hand-operated or power-driven pumps . . . The hydraulic cylinder is removable from head member for servicing or for other use . . . Tracks, tension bars, abutment member and head member are all separate units to facilitate handling and erection of press . . . Presses with power pumps can be controlled from any desired location.

Get complete information and you'll see why Rodgers Forcing Presses are best for your type service jobs.

Send for Catalog

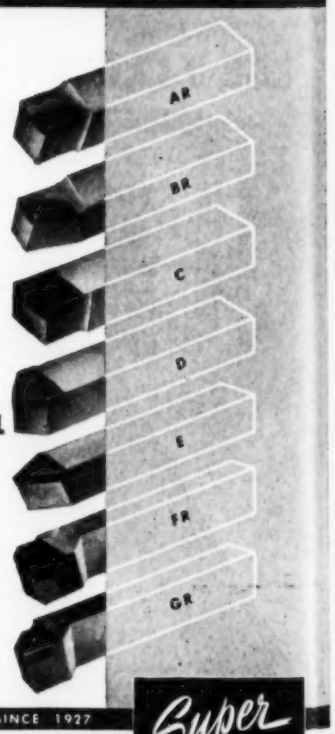
Rodgers Forcing Press Catalog No. 315A has 20 pages of descriptions and specifications on the complete line.

Rodgers Hydraulic Inc.
7425 Walker St., St. Louis Park, Minneapolis 16, Minn.
HYDRAULIC POWER EQUIPMENT

▲ For more details circle **NED-5772** on enclosed inquiry slip ▲

STC FOR TURNING • FACING • THREADING • BORING

Super **STANDARD TOOLS**



NOW IN STOCK
Carbide Tipped
WITH
CARBOLOY -- KENNAMETAL
and available with other leading carbides

Get the benefit of Super's tool making skill and still use the carbide you like.

Send for Supplement No. 5 for net prices and full particulars.

QUALITY CARBIDE TOOLS SINCE 1927

Super TOOL COMPANY
21650 Hoover Rd., Detroit 13, Michigan • 5210 San Fernando Rd., Glendale 3, California

▲ For more details circle **NED-5773** on enclosed inquiry slip ▲

Save TIME and HEADACHES

TRANSPARENT WORK RECORD HOLDERS

Because they keep work records clean and understandable, transparent work holders reduce costly mistakes in office and factory — and step up production. T. P. A. envelopes by NAPLASCO are the quality leaders, featuring crystal clear plastic, leatherette bindings and reinforced corners. They are needed wherever men work to eliminate confusion, "misunderstoods" and alibis . . . and are particularly desirable on defense contracts where clear records are a "must."

Naplasco *T. P. A. HOLDERS

Come in sizes and styles to meet your special needs . . . for work records, job ticketing, material control and many other uses.

Write for low prices. FREE SAMPLE while supply lasts.

TRADE MARK

Makers of Binder envelopes • Blue Print Holders
Workshop Envelopes • I. D. Card Holders
Billfold Inserts • Plastic Specialties.

NATIONAL PLASTIC COMPANY
16 EAST 23RD STREET, NEW YORK, N. Y. • (GRamercy 7-1399)
8 SOUTH DEARBORN, CHICAGO, ILLINOIS • (CEntral 6-0025)
Main Office and Factory
2591 E. FOOTHILL BLVD. PASADENA, CALIF. • (RYan 1-8147)

For more details circle NED-5774 on enclosed inquiry slip

New THERMALINK
Automatic Electric
OIL PRE-HEATING UNITS

★ Integral adjustable thermostat eliminates wiring problems.
★ Adjustable temperature dial marked in degrees.
★ Available with both thermostat and motor control built into unit.
★ No relays or auxiliary controls needed.
★ Available with pipe-thread or flange header.
★ Wattages from 1000 through 7500.
★ Conservative watt-densities prolong life, minimize carbonization.

WRITE DEPT. N FOR DATA SHEETS PRS-152 & FRS-152

ELECTRO-THERM INC. • SILVER SPRING, MD.

For more details circle NED-5775 on enclosed inquiry slip

THE INTERCOM SYSTEM OF 1,000 USES!

WHEELER

Self Powered ELECTRIC TELEPHONE

• Use it to take those constantly called stations off your switchboard.
• Use it where a really PRIVATE line is needed.
• Use it for office-to-factory, factory-to-yard and for temporary lines on construction jobs, etc.
• Use it for a TRULY INDEPENDENT emergency system.
• NO batteries, NO outside power source. Always ready. Effective up to 20 miles.

Write for full data and name of your nearest distributor.

THE WHEELER INSULATED WIRE COMPANY, Inc.
Division of the Sperry Corp.
1108 EAST AURORA ST., WATERBURY 20, CONN.

For more details circle NED-5776 on enclosed inquiry slip

New Processes & Materials

MASONRY LEAK SEALER stops direct leaks in 30 seconds

Direct leaks in below grade masonry walls, floors and tiling are stopped in 30 seconds with Dasquick, a fast-setting purple liquid sealer. Product has initial setting time of 30 seconds when mixed with plain Portland cement and will stop leaks against hydrostatic pressure without removing the pressure. Easy to use, sealer gives permanent results even when applied by unskilled labor. Formulated by **Dasco Chemical Co.,** 1602-04 Thames St., Baltimore 31, Md.

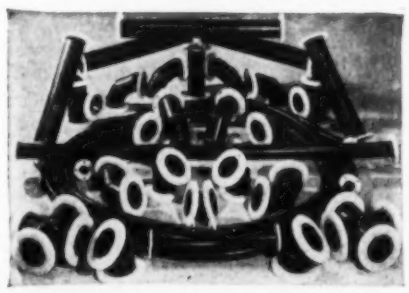
For more details circle NED-5777 on enclosed inquiry slip

COPPER-SILVER ALLOY has high electrical conductivity

Bronze alloy containing 94 per cent copper and 6 per cent silver, sold only in heat treated and cold worked condition, is produced in round wire of 0.160-in. diameter down fine magnet wire gages and flat wire of ½-in. maximum width. Drastic cold working of heat treated alloy develops tensile strengths ranging from 140,000 to 165,000 psi and electrical conductivity of 70 per cent International Annealed Copper Standard. Applications are for spring parts requiring high conductivity and for watch and instrument parts which can be blanked from narrow strip. It shears cleanly, cuts freely and is ductile enough to withstand some forming operations. Made by **Handy & Harman,** Dept. N-10, 82 Fulton St., New York 38, N. Y.

For more details circle NED-5778 on enclosed inquiry slip

SEMIFLEXIBLE PIPE withstands temperature extremes even under corrosive conditions



Tough and durable, Cyclothene semiflexible pipe is highly resistant to a wide variety of solvents and is unaffected by mineral acids, salts and alkalies at temperatures to 150° F. Also unaffected by temperatures as low as −50° F, it retains all of its properties through repeated freezing and thawing and is free from electrolytic corrosion. Uses include sewage and acid drainage, fume piping, corrosives handling and electrical conduit. It is made in sizes from ½ to 6 in.

Hacksaw and screwdriver are only tools used for installation. Semiflexible construction allows it to follow surface contours and be bent. Connection is with knurled and insert connectors clamped with stainless steel bands. Pipe is furnished with welded-on flanges in specific lengths and can be threaded where necessary. Ells, tees and Ys can be fabricated. Made by **Munray Products, Inc.,** 12401 Crossburn Ave., Cleveland 11, O.

For more details circle NED-5779 on enclosed inquiry slip

WIRE STRIPPING PROCESS uses tailor-made stripping unit

Ten girls that formerly stripped 800 armatures per day are now stripping 5000 per day using the Lonco wire stripper and wire stripping process. Insulation is removed at room temperature from Nyclad, Formex, Formvar, vinyl and enamel insulated wire. Moderately priced process eliminates wiping rags, hand burns and dragout losses. Wire down to 39 or 40 gage can be stripped without breakage, annealing or diameter loss. Company offers a tailor-made stripper and process recommendation to firms that send wire samples and estimate of number of armatures or coils to be stripped daily. Developed by **London Chemical Co.,** Dept. KNE, 325 W. 32nd St., Chicago 16, Ill.

For more details circle NED-5780 on enclosed inquiry slip

DE-STA-CO Toggle Clamps speed production on this simple, efficient wood turntable fixture for volume cementing of plastic fish-net floats. Twenty-four Model 210-U clamps are used to obtain quick clamping pressure. The rugged construction of De-Sta-Co clamps has permitted continuous use for over 2½ years producing 240 to 300 floats per hour. Completely retractable, they permit easy insertion and removal of work. De-Sta-Co's positive clamping pressure on the float parts makes a perfect bond and accurate assembly.

Select from over 40 models of De-Sta-Co Toggle Clamps for your work-holding problems in assembly, welding, bonding, machining or inspection of any materials. Positive holding pressures up to 4000 pounds.

Write today for your copy of the De-Sta-Co Toggle Clamp Catalog describing more than 45 stationary and portable types.

DESTACO DETROIT STAMPING COMPANY
360 Midland Ave. • Detroit 3, Mich.

For more details circle NED-5781 on enclosed inquiry slip

SPECIAL EFFECTS ...without special equipment

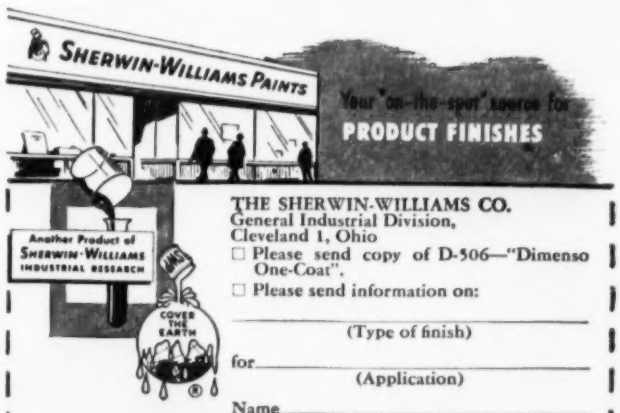
Here's the quick, easy way to get rich, lustrous, hammered-finish effects—*without* hammering—*without* special spray equipment or methods!

Sherwin-Williams Dimenso One-Coat enables you to give ordinary, flat metal surfaces beautiful three-dimension hammered effects with a single coat, with conventional spray equipment. Dimenso One-Coat relieves the monotony of large, plain surfaces . . . can be air-dried or baked . . . provides a finish of great depth and brilliance. Or, by adjusting method of application, deep opalescent effects can be obtained with the same material.

Dimenso One-Coat is one of a complete line of industrial quality product finishes available through Sherwin-Williams Branches in all principal cities.

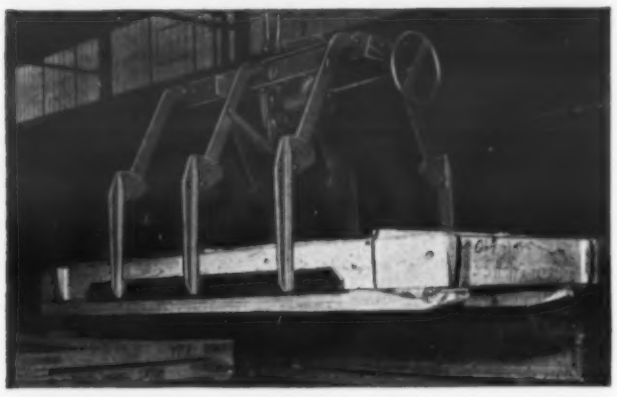
Ask for a copy of descriptive brochure D-506 from your local Sherwin-Williams Branch, or write The Sherwin-Williams Co., General Industrial Division, Cleveland 1, Ohio.

SHERWIN-WILLIAMS
INDUSTRIAL FINISHES



THE SHERWIN-WILLIAMS CO.
General Industrial Division,
Cleveland 1, Ohio
☐ Please send copy of D-506—"Dimenso One-Coat".
☐ Please send information on:
_____ (Type of finish)
for _____ (Application)
Name _____
Company _____
Address _____

For more details circle NED-5782 on enclosed inquiry slip



HERE'S SHEET HANDLING ECONOMY

No better demonstration of the efficiency, flexibility and economy of C-F Lifters can be made than to watch this 5 ton C-F Lifter handle all sheet steel movement in this busy Chicago district warehouse.

C-F Lifters have quick opening jaws with infinite opening and closing adjustments, permitting them to handle a wide variety of sheet widths—wide bearing angles that safely lift sheets without crimping edges—and control to permit close quarter operation—positive jaw controlling mechanism that holds the jaws open in any position—these and many other exclusive features make C-F Lifters a good investment in materials handling equipment.

C-F Lifters are made in manual and motor operated models in sizes to handle from 2 to 60 tons in standard and semi-special designs.

Write for the Bulletin "C-F Lifters"—it describes the advantages and economies C-F Lifters can bring to your sheet handling jobs.

CULLEN-FRIESTEDT CO.
1304 South Kilbourn Avenue • Chicago 23, Illinois

For more details circle NED-5782 on enclosed inquiry slip

ACEC

ACEC Vertical Hollow Shaft Pump Motor

Manufactures ELECTRIC MOTORS for most Industrial Purposes

ACEC—Ateliers de Constructions Electriques de Charleroi, of Belgium—offers American customers wide selection from a diversified line of electric motors.

Conforming strictly to NEMA SPECIFICATIONS, outstanding 3-phase units are immediately available from warehouse stock in the United States; and ACEC Distributors and Service Shops, from coast to coast, are prepared to handle customers' service needs promptly.

Whatever your requirements, write, wire or telephone the nearest ACEC office or representative.

NOW ON HAND
Integral Horsepower Electric Motors—conforming strictly to NEMA SPECIFICATIONS

FULLY GUARANTEED

MOTORS EXCEEDING 200 HP. BUILT TO ORDER

IMMEDIATE DELIVERY from NEW YORK • CHICAGO • KANSAS CITY NEW ORLEANS • DALLAS and LOS ANGELES Warehouses

BELGIAN ELECTRIC SALES CORPORATION
Main Office: ONE E. 53RD ST., NEW YORK 22, N. Y. • PLAZA 8-3105

BRANCHES AND AGENCIES: Los Angeles • San Francisco • Chicago • Kansas City • Cleveland Dallas • New Orleans • Pittsburgh • Louisville • Washington D. C. Youngstown • Savannah • Montreal • Puerto Rico • Mexico City

For more details circle NED-5783 on enclosed inquiry slip

STOP VIBRATION.....

2 WAYS WITH... **LOVEJOY FLEXIBLE COUPLINGS**

By use of special cushion materials, Lovejoy Flexible Couplings stop vibration due to misalignment of shafts *and* vibration inherent in either connected machine! Shock, backlash and surge are also absorbed—instantly and permanently. No shutdowns for changing cushions, which are available for every service . . . 1/6 to 2500 H.P. No lubrication ever needed.

Write for catalog and Quick-Finding Selector Charts

LOVEJOY FLEXIBLE COUPLING CO.
5003 W. Lake St. Chicago 44, Ill.

Also Mfrs. of Lovejoy Universal Joints and Lovejoy Variable Speed Transmissions

For more details circle NED-5784 on enclosed inquiry slip

New Processes & Materials

DYE PENETRANT INSPECTION process used with vapor degreaser

Production line inspection for small surface defects is facilitated by Chek-Spek high speed dye penetrant inspection process. It makes use of two nonflammable,

nontoxic materials: penetrant with flash point of 140° F and developer with flash point of 180° F. Following precleaning by vapor degreaser, the red penetrant is applied. After being allowed to remain long enough to enter the smallest surface defects, dye is removed by suspending parts in vapor zone of degreaser for a few seconds. Then white developer is sprayed on the parts. Capillary attraction pulls out the dye remaining in flaws. The bleeding of red into white shows extent of defect. Process is applicable to both ferrous and nonferrous metals by personnel that can be trained in a short time. Developed by **Turco Products, Inc.**, Dept. NED, 832 E. 62nd St., Los Angeles 1, Calif.

For more details circle NED-5785 on enclosed inquiry slip

PACKAGING DESICCANTS available in variety of forms

Packaged materials sensitive to moisture can be protected by line of desiccants known as Dri-Pax. Pellets are supplied wrapped in printed, colored plastic in different diameters and thicknesses to fit any container. They have high absorption and are readily inserted in bottles by automatic machinery. They are available fabricated in bottle caps. Silica gel material is inert and nontoxic and is also offered in following forms: cellulose acetate spiral capsules or tubular dryers which change color from deep blue to pink as they pick up moisture; and heat sealed packet of webril fabric and paper containing 1 to 15 grams of silica gel. Made by **Davison Chemical Corp.**, Dept. DP, 101 N. Charles St., Baltimore 2, Md.

For more details circle NED-5786 on enclosed inquiry slip

MASONRY & WOOD SEALER preserves, strengthens, protects

Ceramiseal is name of compound developed for preserving, protecting, renewing, strengthening and increasing life of wood and masonry surfaces. It works

equally well on rough old wood and porous masonry, performing a sealing function in addition to above uses. Compound penetrates and expands to fill and seal even the smallest pores, cracks and voids on most surfaces. When completely dry, it becomes a permanent rock-like part of treated area. The brilliant white, powder-like substance is mixed with plain water and spread with stiff brush. Water and weather resisting surface will not peel, crack, flake or powder. Photo shows wall before (left) and after (right) treatment with Ceramiseal. It is now ready for painting or other treatment. Made by **Roc-O-Lite, Inc.**, 2268 S. Parkway, Chicago 16, Ill.

For more details circle NED-5787 on enclosed inquiry slip

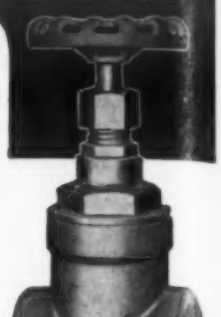
LITHIUM-BASE LUBRICANT withstands water, high temperature

Clinging tenaciously to metal under the hottest operating conditions, lithium-base lubricant is resistant to water. Gun type grease is equally effective in summer or winter in meeting requirements of all pressure fittings and bearings. It does not harden in bearings or separate in storage. By serving a variety of year-round uses, it eliminates stocking specialized greases. Lubricant is packaged in 400 and 100-lb drums and 35-lb pails. Made by **D-A Lubricant Co.**, 1315 W. 29th St., Indianapolis, Ind.

For more details circle NED-5788 on enclosed inquiry slip

Star Performers ON LOW PRESSURE LINES

CRANE WEDGE DISC BRASS GATE VALVES



Want a better working, better looking brass gate valve for saturated steam, hot and cold water lines, heating systems and similar low pressure service? You'll find it in this modernized Crane design with non-rising stem and guided wedge disc. Note in particular the cylindrical shape of the upper part of the body. Here is maximum strength without bulk—solid reinforcement against line and operating strains.

There's extra strength at the wide-faced hex ends, too, and the accurately cut threads pull up smoothly and evenly. Also available with solder-joint ends. Send for folder AD-1725.

WORKING PRESSURES
100 pounds saturated steam
150 pounds water, 200° F.
150 pounds oil or gas, 150° F.
Screwed ends
Sizes ¼ to 2 in.

CRANE CO., 836 S. Michigan Avenue, Chicago 5, Ill.
Branches and Wholesalers Serving All Industrial Areas

CRANE *Everything for Every Piping System*

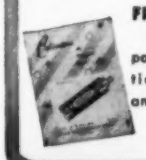
VALVES • FITTINGS • PIPE • PLUMBING AND HEATING

For more details circle NED-5789 on enclosed inquiry slip

30 DAY DELIVERY

HOW TO SPEED PRODUCTION
HOW TO SAVE ⅓ INSTALLATION SPACE
HOW TO GET MORE BORE POWER
HOW TO SAVE MONEY

Use Dependable, Powerful
O-M CYLINDERS
AIR—WATER—HYDRAULIC
In full range of sizes (1½" to 8" bores). All machined steel with bearing bronze throughout. Interchangeable parts and mounting brackets.



FREE CATALOG Brand new! 28 pages of specifications, diagrams, and parts listing.

FREE TEMPLATES Complete set. Shows all cylinders and mounting brackets, ½ scale.

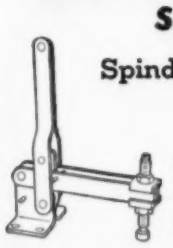
Write today to

ORTMAN MILLER MACHINE CO.
1222 150th St., Hammond, Indiana

For more details circle NED-5790 on enclosed inquiry slip

Which Clamping Arrangement Suits You Best?

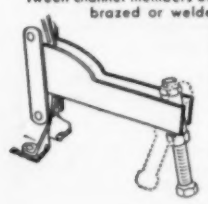
Spindle force at 90° to clamping bar



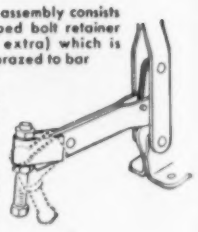
WITH CHANNEL BAR
The spindle assembly readily permits two-way adjustments—horizontal and vertical. Requires no welding or brazing.

Spindle force at other angles to bar

WITH CHANNEL BAR
The spindle assembly, held by a bolt bushing (furnished extra) between channel members of clamp, is brazed or welded at desired angle to meet specific clamping conditions. Spindle is adjustable for height.



WITH SOLID BAR
The spindle assembly consists of a U-shaped bolt retainer (furnished extra) which is welded or brazed to bar at any desired angle to meet your clamping requirements. Spindle is adjustable for height.



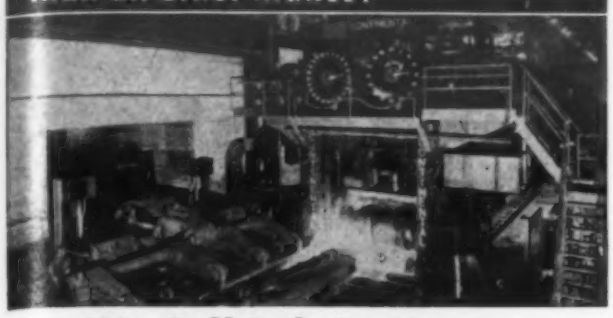
Bolt Bushings and Bolt Retainers available in sizes for most Knu-Vise models.

Sales offices in principal cities. Teletype DE 49.

KNU-VISE PRODUCTS **LAPEER MFG. CO.**
3062 DAVISON ROAD • LAPEER, MICHIGAN

For more details circle NED-5791 on enclosed inquiry slip

There are more TRABON Automatic Lubricating Systems in operation than all other makes!



We Sell Lubrication...

● Which means Trabon customers get a lubricating system that—day after day and year after year—properly lubricates bearings, with a minimum of down time and maintenance.

No shutdowns due to bearing failure—no work stoppage for lubrication . . . Trabon lubricates as your machines produce . . . delivers the right amount of lubricant to each bearing.

Repeat orders prove the merit of Trabon. Trabon Lubricating Systems are your insurance against costly down time and lost production.

Trabon
OIL AND GREASE SYSTEMS

TRABON ENGINEERING CORP.
1814 East 40th Street
Cleveland 3, Ohio

For more details circle NED-5792 on enclosed inquiry slip

M&M
GIANT KEYSEATERS

M & M Giant Keyseaters, built in a wide range of sizes, speedily and accurately cut internal keyways or splines in the bores of pulleys, gears, fly wheels or any other machine part. Special fixtures and cutters are available for unusual shaped keyways and taper work. Send us your problems today.

MITTS & MERRILL 68
1000 South Water • SAGINAW, MICH.

For more details circle NED-5793 on enclosed inquiry slip

CLEAN COOLANT CUTS REJECTS to 1/2%

. . . . production up 15 to 20%

Rejects—averaging 25% with unfiltered coolant—were reduced to less than ½% when Bowser filtered. Our nearest sales engineer will welcome an opportunity to discuss your coolant filtration problems. May we have him call?

There's a Bowser cutting oil or coolant filter for any metalworking requirement.

BOWSER, INC.
1381 Creighton Ave., Fort Wayne 2, Ind.
Liquid Handling Specialists Since 1885

For more details circle NED-5794 on enclosed inquiry slip

New Processes & Materials

PRESSURE-SENSITIVE TAPES with crepe or flat backs

Line of general-purpose pressure-sensitive tapes called Continental Red Tape is available in ½ to 36-in. wide, 180-ft rolls with either crepe or flat backs. Red color affords effective contrast for masking uses and is an attention getter for wrapping and packaging. Tape is highly flexible, unrolls easily in hot or cold weather, is water-resistant and has tensile strength in excess of 25 lb per inch. It is packed with equivalent of 18 in. of tape width to the case rather than usual 36-in. packing to allow small or large users to keep fresher, cleaner stock. Center partition dust-seals half of carton. Made by **Continental Tapes**, P. O. Box 500, Cayce, S. C.

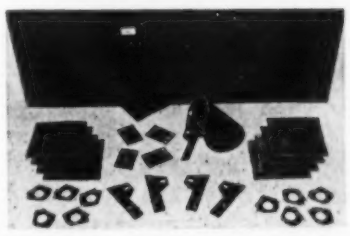
For more details circle NED-5795 on enclosed inquiry slip

WATERPROOFING COATING colorless liquid resists corrosives

Stucco, glass brick and cement walls are among surfaces which can be waterproofed with Dashide, a colorless waterproofing liquid which, when brushed or sprayed, penetrates ¼ to ½-in. into surface. Coating breaches and seals all hairline cracks with no effect on outward appearance of treated wall. It is resistant to acids, alkalies and temperature extremes without checking, cracking or peeling. Under test by Bureau of Standards on U. S. Naval Supply Depot buildings, coating kept walls perfectly dry in rains driven by hurricane winds which came three years after application. Untreated walls showed saturation. Developed by **Dasco Chemical Co.**, 1602-04 Thames St., Baltimore 31, Md.

For more details circle NED-5796 on enclosed inquiry slip

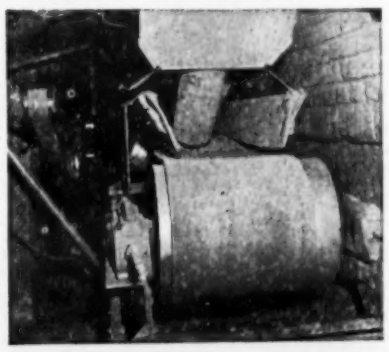
INSULATING MATERIAL is glass fiber reinforced polyester



Highly resistant to elevated temperatures in electrical apparatus, Glastic-940 thin gage insulating material made from glass fiber reinforced polyester will not flake or separate. It has good arc tracking resistance, dimensional stability and punches cleanly. Conforming to NEMA thickness tolerances, material is available in standard sheet sizes of 24 x 36 in. and in thicknesses down to 1/32-in. for such applications as relay build-ups, resistance welding transformer barrier insulation, top-stick material in motors, transformer end wrapping and television parts. Made by **Glastic Corp.**, E. 40th St., near Hough, Cleveland 3, O.

For more details circle NED-5797 on enclosed inquiry slip

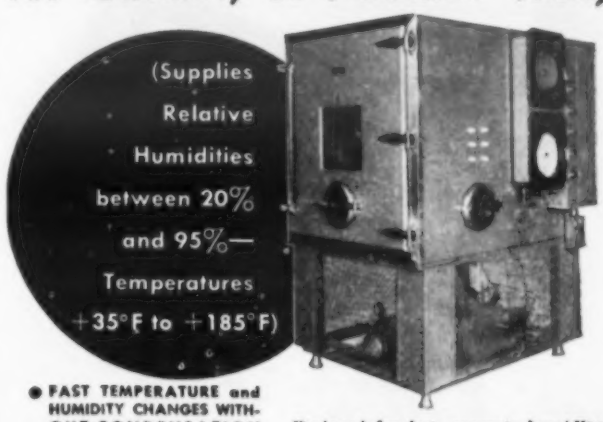
OVEN CONVEYOR BELT for constant 600° F operation



Constant temperatures of over 600° F are well within range of the ABC Hotstuff conveyor belt designed for rapid drying operations in infra red or radiant heat ovens. Belt surface is untreated to eliminate "weeping" and product contamination caused by offsetting. Carcass is of high strength cotton duck made in 37½ or 39 oz weights. Insulation between plies of asbestos cloth and between asbestos and duck keeps excessive heat away from carcass. Two or more plies of asbestos are stitched on conveying side. Where offsetting is not a problem, a standard belt is available coated with abrasion resistant material to keep it flexible and increase its life. Made by **Main Belting Co.**, Room 190, 1241 Carpenter St., Philadelphia 47, Pa.

For more details circle NED-5798 on enclosed inquiry slip

new HUMIDITY TEST CABINET for *Laboratory* or *Production Testing*



● FAST TEMPERATURE and HUMIDITY CHANGES WITHOUT CONDENSATION FORMING
● 27 cu. ft. working space
● Stainless steel interior
● Hermetically sealed refrigeration system
● Built-in electrical leads for quick, easy connections in electrical unit testing
● Forced air circulation—glass viewing panel

Designed for fast, accurate humidity testing in a wide range of temperatures. Extremely flexible in operation due to fast temperature changes obtained by hermetically sealed refrigeration unit and electrical heating unit. Extra capacity condenser system prevents condensation forming during temperature changes and throughout testing period.

Optional time control for presetting dry and wet bulb temperatures for automatic variation of relative humidity available. Complete line of Cold Temperature Chests and Cabinets is available as a standard item. Details on request.

Write for Catalog and full data today.

MURPHY & MILLER, Inc.
1334 South Michigan Avenue • Chicago 5, Illinois

For more details circle NED-5799 on enclosed inquiry slip

A case history based on the experience of the Hyster Company, Portland, Oregon

Intermediates that last like photographs produced at low cost

By reproducing its engineering drawings on Kodagraph Autopositive Paper, Hyster gets intermediates which have dense black photographic lines on a translucent, durable paper base. *Intermediates* which will remain intact . . . and produce sharp, legible blueprints and direct-process prints whenever needed.

And the cost is surprisingly low because Autopositive boasts unique photographic properties: It can be handled in room light . . . and it produces positive copies *directly*—without a negative step. Also, it can be exposed in any blueprint or direct-process machine . . . and processed in standard photographic solutions. Hyster uses a blueprint machine which has also been designed to produce Autopositive intermediates in a continuous flow.

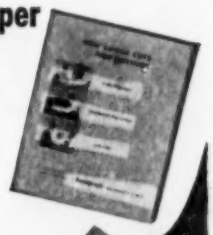
How The Hyster Company Uses Autopositive

For All Print Production. Autopositive intermediates are used instead of valuable and perishable original drawings . . . greatly reducing the possibility of reading errors in the shop.

For "Permanent" Files in its home office . . . and branches in the U.S. and abroad. With Autopositive intermediates there are no costly delays due to intermediates fading, turning yellow, or becoming brittle.

For Drafting Room Short Cuts. Autopositive Paper saves drafting time by reclaiming old drawings . . . and duplicating standard designs which will be included in new drawings.

Kodagraph Autopositive Paper
"The Big New Plus" in engineering drawing reproduction



Learn all the ways you can use Kodagraph Autopositive Paper, which you, or your local blueprinter, can process *quickly . . . economically . . . at low cost.*

EASTMAN KODAK COMPANY
Industrial Photographic Division
Rochester 4, N. Y.

Kodak

For more details circle NED-5800 on enclosed inquiry slip

NEW LOCKER CATALOG

- Presents a Complete Range of Locker Types and Sizes.
- Tells How to Provide More Storage in Less Floor Space.
- Gives Newest Ideas on Locker Room Layout, Ventilation, etc.
- Shows How to Make "Custom-Type" Installations with Economical Standard Lockers.
- Lists Ways to Save Time and Money when Ordering.

Send for Your Free Copy Today!

penco *Perma Built* **STEEL LOCKERS**
SHELVING • CABINETS
Pioneer in Sheet Metal Products Since 1869

PENN METAL Corporation of Penna.
82 OREGON AVE., PHILA. 48, PA.

For more details circle NED-5801 on enclosed inquiry slip

79% Saving in Man-Hours BY THIS ELWELL-PARKER Truck

This E-P Clamp Truck moves 200 rolls of paper from Receiving Dock to Warehouse Storage in 10 man-hours. Previous manual methods took 48 man-hours to do the same job. Besides this big benefit, rolls can be stacked higher to save floor space. Paper spoilage is practically eliminated. The truck can carry and stack rolls either horizontally or vertically . . . Especially designed for handling paper rolls, these Elwell-Parker trucks can also transport many other cylindrical loads in varying diameters.

WRITE FOR NEW FOLDER ON THE ELWELL-PARKER ROLL CLAMP TRUCK

THE ELWELL-PARKER ELECTRIC COMPANY
4094 St. Clair Avenue • Cleveland 3, Ohio

For more details circle NED-5802 on enclosed inquiry slip

COUNTERS for Every PURPOSE LARGE or small

Avoid Labor and Error of Hand Counting

Eliminate guesswork, waste and delay. PIC modern, dependable, long-wearing Counters effect wonderful economies—repay their cost over and over—in Auto and Aircraft factories; Metal Working, Die Casting, Plastic Molding and Stamping Plants; Steel and Paper Mills; Factories and Breweries; Can, Carton, Bottle Cap and Printing Plants. Types and sizes for every purpose.

Counting Problems SOLVED

Tell us WHAT you want to count or send for CATALOG

MODERN COUNTING DEVICES
Stroke and Revolution Counters
Coil Winding Counters
Electric Counters
Automatic Batch Counters
Actuating Switches

PRODUCTION INSTRUMENT COMPANY
700-12 W. Jackson Blvd., Chicago 6, Ill.
Send PIC Modern Counter Catalog with handy Counter Application Form.

Name_____
Street_____
City_____ Zone____ State_____
MG-1

For more details circle NED-5803 on enclosed inquiry slip

New Processes & Materials

CONCRETE HARDENER
lets floors withstand heavy trucks

Clean and colorless Concrete Floor Hardner No. 860 hardens and dustproofs concrete floors so that they can withstand extra heavy trucking. It changes chemical structure of concrete, forming a dense, nonporous, flint-like surface, increases general floor strength and retards cracking and chipping. It resists water, oil and acid and lowers cleaning costs. Application is by brush or mop. Made by **Monroe Co.**, Dept. M-1, 10703 Quebec Ave., Cleveland 6, O.

For more details circle NED-5804 on enclosed inquiry slip

FIRE-RETARDANT COATING
protects wood uprights against fire

Telegraph, telephone and electric wire poles, bridge timbers and other upright wood objects can be protected from fire by Fireplate bituminous fire-retardant coating. Under extreme heat, it remains in place on vertical wood surfaces and releases fire-smothering gases. Coating provides fire protection the moment it is applied as its solvent is incombustible. Application can be by brush or spray. It is available in 30 and 55-gallon drums and 5-gallon pails. Illustration shows Fireplate protected post, left, and unprotected post, right. Both were exposed to same kindling fire. Made by **Zone Co.**, 917A N. Main St., Ft. Worth 6, Tex.

For more details circle NED-5805 on enclosed inquiry slip

POLYESTER LAMINATES
made in sheets, rolls, or tape

Now available in sheets or in continuous strips of any desired length, Iolyte polyester laminates are fabricated in thicknesses from 8 mills to ¼-in. or more. Product can be ordered in sheets, rolls or tape. Pound for pound it has tensile strength of steel, is one-fifth its weight and can withstand continuous exposure to temperatures up to 350° F. Having low water absorption and good electrical properties, plastic is shatterproof, scratchproof and resistant to chemicals. It is easy to machine, saw, drill, stamp, nail or glue and can be had in any color, translucent or opaque. Product can be fabricated into ducts, pipe, tube, tanks or into molded shapes. Filler can be Fiberglas cloth or mat, cotton cloth, Orlon, nylon or other synthetic fibers or cloth. Made by **Industrial Organics Corp.**, 59-29 54th St., Maspeth 78, N. Y.

For more details circle NED-5806 on enclosed inquiry slip

VALVE STEM PACKING
shorts out electrolytic action

Sacrificial metal incorporated in style 187 packing short circuits the electrolytic action that attacks 410 and 416 chrome steel valve stems after a hydrostatic test. Asbestos yarn is braided around a resilient graphite and asbestos core. It withstands temperatures to 850°F and pressures to 2000 psi and has dry graphite lubrication. Packing can be deformed in any size. Corrosion eliminating feature is also available in endless plastic rings for hydrocarbon valves and steam service. Made by **Crane Packing Co.**, Dept. F-25, 1800 Cuyler Ave., Chicago 13, Ill.

For more details circle NED-5807 on enclosed inquiry slip

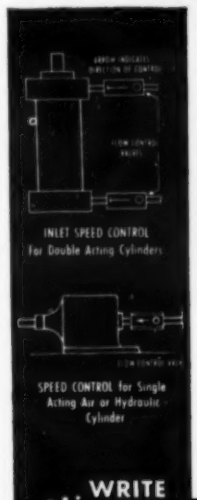
UNIVERSAL STANDARD COLLET CHUCKS

tools can't slip
tools run true

UNIVERSAL ENGINEERING COMPANY
FRANKENMUTH 5, MICHIGAN
162-A

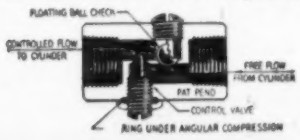
For more details circle NED-5808 on enclosed inquiry slip

FLOW CONTROL VALVE
for Cylinder Speed Adjustments over a WIDE RANGE IN AIR OR HYDRAULIC USE



The Pneu-Trol Flow Control Valve combines an efficient Stainless Steel FLOATING BALL CHECK which opens and closes at the slightest change in flow direction, with a Vernier Type VARIABLE NEEDLE ORIFICE adjustment in a compact control which has widened air and hydraulic cylinder application by providing precise control of cylinder action. Modifications of the Pneu-Trol Valve are available as Plain Check, Check with Fixed Orifice (orifice drilled by customer in the Standard Check Valve), Needle Valve and Velocity Limiting Check. All Pneu-Trol Valves are made from bar stock in brass (up to 1000 psi) or steel (5000 psi) or other body metals to your specifications. All internal parts are Stainless. All valves available in 5 sizes—⅛", ¼", ⅜", ½", and ¾".

Attractive prices — immediate delivery. Write for illustrated circular and price list.



. . . WRITE

Pneu-Trol Devices, Inc.
1432 N. Keating Ave., Chicago, Ill.

For more details circle NED-5809 on enclosed inquiry slip

WHY?

. . . because the "Packet" Adjustable Trolley Hoist saves money *all ways!* It features adjustable trolley to suit different sized I Beams without dismantling. The hoist mechanism has "lubricated-for-life", shielded ball bearings, which require no maintenance. Compact, rugged, all steel construction. Precision cut gears of heat-treated alloy steel for longer, smoother operation. And high carbon steel trolley wheels have double row pressure-lubricated ball bearings for easier positioning of hoist and load. ½ ton costs only $125.00; 1 ton, $135.00; 2 ton, $190.00. For full details consult your Harrington Distributor or write The Harrington Company, 1650 W. Callowhill St., Philadelphia 30, Pa.

THE **HARRINGTON** COMPANY
1650 W. CALLOWHILL ST.
PHILADELPHIA 30, PENNA.

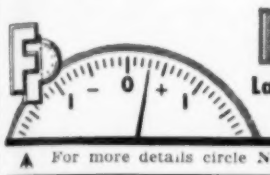
MANUFACTURERS of HOISTS SINCE 1876

For more details circle NED-5810 on enclosed inquiry slip

GAGE and SORT PRECISION PARTS

Automatically and at High Speed

The final inspection and sorting of mass-produced, similar parts is automatically accomplished by Federal Gaging and Sorting. The speed of automatic gaging is limited only by the speed of mechanical handling of the workpieces. As for accuracy, extremely high magnifications can be provided, (in millionths when necessary) or fairly low magnification and long range. Practically any dimension or several dimensions or dimensional conditions can be gaged by Federal Automatic Sorting Gages. Write us for information on all types of automatic gages. FEDERAL PRODUCTS CORPORATION, 1176 Eddy Street, Providence, R. I.



FEDERAL

Largest manufacturer of indicating type gages . . . exclusively.

▲ For more details circle NED-5811 on enclosed inquiry slip ▲

Junk these cumbersome contraptions

GO MODERN GO VARIDRIVE

INFINITE SPEEDS from this single motor

•

2 to 10,000 rpm

•

¼ to 50 hp.

•

Quiet, shockless

•

REQUEST BULLETIN

You simply turn a control handle. Instantly the speed of the Varidrive changes to the exact rpm you want. You don't have to resort to the use of external speed changers, gear boxes, rheostats, controllers and other contraptions.

U.S. VARIDRIVE MOTOR

U.S. ELECTRICAL MOTORS Inc.

P. O. Box 2058, Los Angeles 54, Calif. Milford, Conn.

▲ For more details circle NED-5812 on enclosed inquiry slip ▲

Cut Welding Time 40%!

Get fewer rejects!
No burn-throughs!
100% penetration!
X-ray quality!

Use a P&H AC Welder

—the only welder with Instantaneous Control

Ideal for use with inert gas. Lets you handle "hard-to-weld" metals with ease — aluminum, magnesium, brass, copper, stainless, high carbon, high alloy, and low carbon steels.

A touch of your toe instantly gives you the exact heat you need — there's no time lag! And there's no burn-back to oxidize the metal before you get started.

Only the P&H Inert Gas Welder saves production time these five ways: (1) Foot switch automatically starts power, high frequency, gas, water. (2) Arc starts instantly without touching work. (3) Foot control instantly provides exact heat needed *while* welding. (4) Foot switch cuts power and high frequency immediately or gradually at completion of weld. (5) Automatic time delay shuts off gas and water.

There are more outstanding P&H AC Welder features. Ask your P&H representative to tell you about them — or write us for further information. 2427A

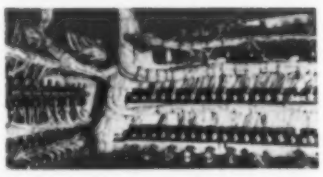
P&H WELDING DIVISION
HARNISCHFEGER CORPORATION
4537 W. National Ave.
Milwaukee 46, Wisconsin

POWER SHOVELS • CRAWLER AND TRUCK CRANES • OVERHEAD CRANES • HOISTS • ARC WELDERS AND ELECTRODES • SOIL STABILIZERS • DIESEL ENGINES • PRE-FABRICATED HOMES

▲ For more details circle NED-5813 on enclosed inquiry slip ▲

New Processes & Materials

ELECTRONIC WIRE
has extruded plastic jacket



Developed to meet electronic wiring applications for military aircraft, this aircraft wire has polyvinyl chloride plastic primary insulation and extruded nylon jacket. It meets requirements of MIL-W-527A specification. Plastic primary coating gives wire resistance to cold weather, oil, grease, fungus, abrasion and flame. Nylon jacket provides additional protection. Wire withstands contact with Skydrol hydraulic fluid and minimum of 5000 v ac at 60 cycles root-mean-square without failure. Made by **Surprenant Mfg. Co.,** 199 Washington St., Boston 8, Mass.

▲ For more details circle NED-5814 on enclosed inquiry slip ▲

MASONRY WATERPROOFER
usable on above-grade exterior areas

Applicable by brush or spray, Ranetite No. 11 silicone-base water repellant can be used on surface of above-grade exterior masonry. It can be applied at temperatures as low as freezing and is effective against efflorescence. Clear and invisible, it does not change appearance of masonry. Because it does not seal masonry pores, walls can "breathe." Oil-base paints will adhere to surfaces which have been coated with this water repellant. Made by **Ranetite Mfg. Co.,** 1917 S. Broadway, St. Louis 4, Mo.

▲ For more details circle NED-5815 on enclosed inquiry slip ▲

ALUMINUM WELDING FLUX
also usable for stainless steel

Effective either as a paste or powder, No. 35 aluminum welding flux is designed for X-2S and X-43S aluminum rods, but can be used for gas welding stainless steel as well. Flux does not break down at temperatures required for welding stainless and will not flake off to cause rough bubbly weld. It spreads thinly and evenly ahead of flame, cleans oxides efficiently ahead of puddle and floats out impurities to leave bright, smooth puddle. It also protects aluminum or stainless on each side of weld area and cleans easily. Developed by **All-State Welding Alloys Co.,** 273 Ferrisden Ave., White Plains, N. Y.

▲ For more details circle NED-5816 on enclosed inquiry slip ▲

ANTISEPTIC PROTECTIVE CREAMS
bulk dispenser facilitates use

Skin irritations caused by free acids or alkalies are prevented by Liquicreme antiseptic protective creams. Types available include water soluble vanishing cream which gives protection against dust-borne irritants, viscous oils, dirt, greases and grimes; water-resistant soft cold cream for protection from dilute acids and alkalies; and a solvent-resistant water soluble vanishing cream for those using organic solvents, acetates and cooling and cutting oils of low water content. Creams have bacteriostatic properties.

In addition to 12-oz tubes for ease of application, illustrated Liquicreme dispenser is available. It delivers predetermined amount of cream into palm of hand with each stroke of lever. This plastic unit has inner collapsible polyethylene bag which prevents contamination of cream. Made by **West Disinfecting Co.,** Dept. DE, 42-16 West St., Long Island City 1, N. Y.

▲ For more details circle NED-5817 on enclosed inquiry slip ▲

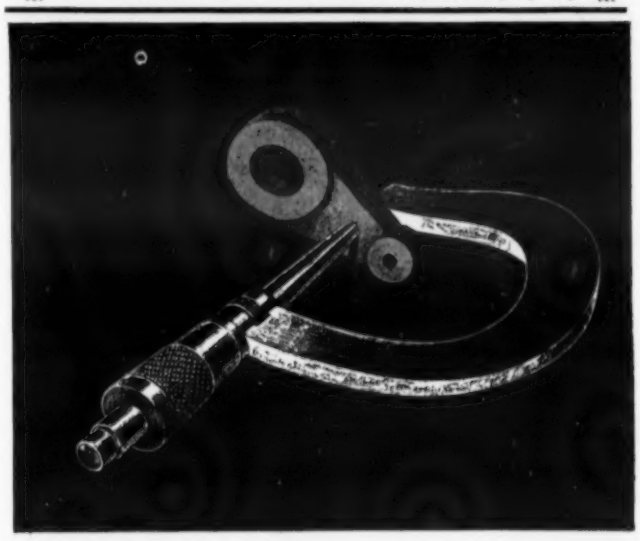
INDEXING?

Geneva Drives for PROFITS

- Custom Designs at Mass Production Prices
- Geneva Wheel Locating Plates
- Precision Indexing Plates
- Complete Assemblies
- Free Engineering Service
- Let Us Solve Your Indexing Problems
- Geneva Drives In Any Number of Points (Including the "2 Point Drive")

For Information Write, Wire, Phone
GENEVA MACHINE & TOOL CORPORATION
400 Ellamae Ave. Phone 2-3284 Tampa, Florida

▲ For more details circle NED-5818 on enclosed inquiry slip ▲



CLOSE-TOLERANCE CASTINGS HIGH YIELD PRODUCTION

Castings need only a minimum of machining when produced by the "C" process. Tolerances as close as .003 to .005 inches per inch can be achieved. The thin, light molds, made of fine-grained sands bonded with BAKELITE Phenolic Resins, have almost pattern-smooth surfaces, providing castings of better finish.

This means greater economy for you—money saved—by reduction of costly machining and finishing operations, by fewer rejects and less waste metal.

Properly applied to your needs, the use of shell molds made with BAKELITE Phenolic Resins offers a new way to meet production goals with faster output and lower costs. Ask your foundryman about including the process in your plans. Or, write Dept. DO-53.

BAKELITE
TRADE-MARK
PHENOLIC BONDING RESINS

BAKELITE COMPANY
A Division of
Union Carbide and Carbon Corporation
30 East 42nd Street, New York 17, N. Y.
In Canada:
Bakelite Company (Canada) Ltd., Belleville, Ont.

▲ For more details circle NED-5819 on enclosed inquiry slip ▲

Time Savings UP TO 50% IN ABRASIVE FINISHING!

You know the cleaning, cushioning and polishing advantages of rubber, the finishing actions of abrasives. Use the advantages of both in Brightboy—for working lightweight and semi-precious metals, plastics, laminated materials, wood and glass. *Combine burring, finishing, cleaning and polishing into one time saving operation!*

BRIGHTBOY SAVES PRODUCTION AND MAINTENANCE TIME

Bridges the gap between the rough grind and the buff; takes up where coarse abrasives leave off; works to close tolerances; can be shaped to contour. Produces a wide variety of conventional and special finishes and patterns; frequently the final polish. Requires no before-use preparation or dressing; no skilled labor to handle it.

A FEW OF MANY GENERAL USES

Removing light digs, tool and heat marks. Cleaning welded and soldered joints. Finishing dies and molds. Burring stampings, castings, machined parts. Maintaining tools, production and plant equipment.

Ask your dealer for the informative Brightboy Catalog Manual outlining uses and adaptations. Write the Brightboy Service Department on any problem where finishing is involved.

BRIGHTBOY INDUSTRIAL DIVISION
Weldon Roberts Rubber Co.
6th Ave. & No. 13th Street
Newark 7, N. J.

WELDON ROBERTS Brightboy RUBBER CUSHIONED ABRASIVES

America's Pioneer Manufacturer of Rubber-Bonded Abrasives

▲ For more details circle **NED-5820** on enclosed inquiry slip ▲

The Only...

FABRI-VALVE

FABRICATED ALLOY VALVES

LOOK FOR THIS TRADE MARK

FABRI-VALVE

ACCEPT NO SUBSTITUTES

Save ON ORIGINAL PRICE, INSTALLATION and SHIPPING COSTS

FABRI-VALVES are complete weldments from rolled plate, thus eliminating any porous areas and insuring proper thickness where desired.

FABRI-VALVES weigh considerably less than a cast valve, making a large saving not only in original price but in installation costs and shipping weights.

FABRI-VALVES are a modern development built for use in conjunction with modern lightweight pipe and fittings.

Write inquiries to dealer listed below or to home office for descriptive literature.

SIZES IN STOCK 2" to 24"
SPECIAL ORDERS IN 30 DAYS

AGENTS:
SOUTHERN CORPORATION, Charleston, S. C.
M. J. GIGY & ASSOCIATES, San Francisco, Cal.
JOHN B. ASTELL & CO., New York, N. Y.
NORTHWEST COPPER WORKS, Inc., Portland, Ore.
THOS. W. MacKAY & SON, Ltd., Vancouver, B. C.
CHANDLER BOYD CO., Pittsburgh 19, Penn.

FABRI-VALVE CO. OF AMERICA
2100 N. Albina Ave., Portland 12, Oregon

▲ For more details circle **NED-5821** on enclosed inquiry slip ▲

New Processes & Materials

PUMP PACKING resists wide variety of solvents

Disintegrating effects of aliphatic and aromatic hydrocarbons such as solvent naphtha, gasoline, benzine, tuluol and others are resisted by Sav-On pump packing. Designated as No. 701 in spiral form and No. 705 in ring shape, it does not swell or soften. Composition includes solvent resistant binder, shredded metal, asbestos and lubricating graphite wrapped in a woven cotton casing. Application can be to all centrifugal, rotary and reciprocal pumps operating up to 550° F and 1000 psi. Made by **Sea-Ro Packing Co.**, 129 Woodridge St., Wood-Ridge, N. J.

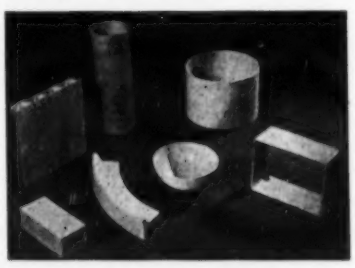
▲ For more details circle **NED-5822** on enclosed inquiry slip ▲

MASONRY COATING usable on brick, cement or block

Providing both decoration and protection against moisture infiltration, Mason-Coat No. 310 is oil-base paint which is applicable to interior and exterior masonry surfaces. It is usable on concrete block, cement, brick, stucco, asbestos cement siding and similar surfaces, and application can be by brush or spray. Because it is elastic, it withstands severe weather and temperature changes. Hiding quality is good. It is offered in white and several tints. Made by **United Laboratories, Inc.**, 16804 Euclid Ave., Cleveland 12, O.

▲ For more details circle **NED-5823** on enclosed inquiry slip ▲

LOW PRESSURE LAMINATES have high heat stability and can be easily machined

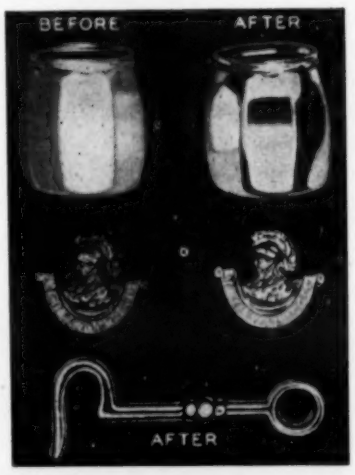


When molded of glass cloth and 2104 silicone bonding resin at pressures from 3 to 30 psi, series of low pressure laminates will withstand continuous exposure to temperatures in the range of 500° F and intermittent exposure as high as 900° F. Physical and electrical properties are comparable to those of conventional high pressure silicone-glass laminates molded at 1000 psi or higher. They possess high mechanical strength and are smooth, nonporous, easily machined, highly water repellent and resistant to most commonly used chemicals.

Weight is less and strength is greater than aluminum or magnesium at 500° F. Laminating stocks can be preformed and used to prepare complex shapes either by bag molding or in light metal molds. Flat laminated thicknesses can range from 0.01 to 2.00 in. Photo shows laboratory samples. Made by **Dow Corning Corp.**, Dept. IS, P. O. Box 592, Midland, Mich.

▲ For more details circle **NED-5824** on enclosed inquiry slip ▲

BARREL BURNISHING COMPOUND produces hand buffed appearance



Any metal can be given a hand buffed appearance by using Blue Magic No. 0-221 burnishing compound with any tumbling medium in standard barrel finishing equipment suitable for wet tumbling. The product can be used repeatedly and will coat a cutting medium such as Alundum tumbling abrasive and make it a burnishing medium. Compound is mixed and removed readily with water, has no objectionable odor and is not irritating to the skin. Working samples and company laboratory facilities are available. Photo shows before and after examples of nonferrous metal items burnished for 60 minutes with steel shot and compound. Made by **Blue Magic Chemical Specialties Co.**, 2137 Margaret St., Philadelphia 24, Pa.

▲ For more details circle **NED-5825** on enclosed inquiry slip ▲

NOW—GET DIESEL POWERED BUDA TOWING TRACTORS

LOWER operating cost
LESS maintenance
GREATER safety
LONGER operation between overhauls

Diesel Powered TG-24 Towing Tractor—2400 lbs. draw bar pull

Cut fuel costs 50 to 65% with Buda Diesel-powered towing tractors . . . and get safer, non-toxic, non-contaminating operation. Eliminate fire hazards. Diesel-powered tractors can operate safely in hazardous areas. Buda Diesel power gives more hours of dependable, low-maintenance operation and long-life performance.

Ask your nearby Buda Material Handling Distributor about Buda Diesel Powered equipment. He has the facts. Write for Bulletins and specification data. THE BUDA COMPANY, HARVEY, ILL.

... The Line with ALL 3 for Diversified Handling

BUDA — Towing Tractors, Platform Trucks, Fork Trucks

▲ For more details circle **NED-5826** on enclosed inquiry slip ▲

When is a lathe too big?

A lathe is too big when:

SHELDON CHICAGO

TS56B 11¼" Swing

(1) When it is too large and complex for any but the most experienced to operate safely.
(2) When the power cost is excessive for the tool load.
(3) When the tool investment is out of all proportion to the requirements.
(4) When it is too cumbersome and too slow.
(5) When it takes up floor space, heat and light in which output could be multiplied with smaller machine tools.

Modern Sheldon Precision Lathes, eliminate these excess costs and loadings on many everyday operations—leaving far more on the profit side. 10"—11" and 13" Swing. "Zero Precision" Tapered Roller Bearings. Increased collet capacity.

Write for catalog.

Sheldon Machine Co., Inc., 4215 N. Knox Ave., Chicago 41, Ill.

▲ For more details circle **NED-5827** on enclosed inquiry slip ▲

GET IN THE SCRAP

Send for this new booklet—it tells how you can help out in the emergency facing the nation.

Many thousands of manufacturing plants now face serious shortages of steel and products made of steel.

Unless the steel mills and foundries get more *scrap* iron and steel, it will be impossible to meet current demands for both military and civilian production.

You have the needed scrap—in the form of "idle" iron and steel: obsolete machinery, no-longer-usable jigs and fixtures, chain, gears, pulleys, pipe, etc.

Set up a Scrap Salvage Program in your plant* and help keep the steel coming! Non-ferrous scrap is needed, too!

SCRAPPY SAYS: AID DEFENSE MORE SCRAP TODAY... MORE STEEL TOMORROW

*For copy of "how-to-do-it" booklet, address Advertising Council, 25 W. 45 St., New York 19, N. Y.

NEW EQUIPMENT DIGEST

▲ For more details circle **NED-5828** on enclosed inquiry slip ▲

Fastest THROUGH CONCRETE

and YOU GET

MORE HOLES PER DRILL WITH TERMITES

ask any TERMITE user

NO MASONRY TOO TOUGH . . . where ordinary drills fail, TERMITES *keep going* to give you today's fastest and lowest-cost masonry drilling! Here's why:

1. TERMITES *continuous* spiral worm, beginning at the grinding inserts, starts to carry away material the instant it is pulverized.
2. TERMITES exclusive "WICTU" inserts last longer and cut faster.

Use TERMITES on your next drilling job . . they're engineered to give you "more holes per dollar." Diameters from ¼" to 5" Lengths up to 36". Use with electric drills.. Literature available.

Order today through your distributor

TERMITE

ROTARY MASONRY DRILLS

Made only by TERMITE DRILLS, INC.

84 N. Lotus Ave. Pasadena 8, California

For more details circle NED-5829 on enclosed inquiry slip

● The Wachs Safety Counterbalanced Vault Cover can be opened with ease and safety by one man. To open, merely insert the combination Key-Handle, give it a half turn and open the cover with one hand. The counterbalance weights that make lifting the cover a one handed job also hold it in an upright, protective position while a man is below. Designed and manufactured to withstand the heaviest traffic, many of these units have given trouble free service for over 40 years under the most rugged conditions. Several leading utility companies have had them in use for this period of time.

Write today for descriptive literature showing dimensions, weights, construction, prices, etc.

THE E. H. WACHS COMPANY

Manufacturers of Engines, Valves and Machinery since 1897

1525 NORTH DAYTON STREET · CHICAGO 22, ILLINOIS

For more details circle NED-5830 on enclosed inquiry slip

Wherever it's HOT specify Sicon

NEW IMPROVED SILICONE-BASE HEAT-RESISTANT FINISH

Protects Stewart Warner's New Saf-Aire Wall Furnace

Quality finish specifications for this heating unit called for a coating that would stand 500° and still retain its color and gloss—a temperature far above that incurred in normal operation. Ordinary heat resistant coatings failed. SICON *Ivory* and SICON *Beige* worked perfectly...just as SICON has solved so many other finish problems. *Write for dynamic proof of SICON'S amazing stability under heat! New Brochure now ready.*

Manufactured exclusively by

MIDLAND Industrial Finishes

Waukegan, Ill.

ENAMELS · SYNTHETICS · LACQUERS · VARNISHES

For more details circle NED-5831 on enclosed inquiry slip

New Processes & Materials

SEALING COMPOUND
rubberized for indoor, outdoor use

Applicator nozzle on tube of Krak-Tite quick-acting sealing or caulking compound is designed to facilitate filling of cracks and holes. Product is brilliant white and rubberized for indoor and outdoor filling of wood or cement cracks in windows, doorways, floors, skylights, chimneys, sinks, showers, tile boards and boats. Compound is practical for use before painting or redecorating since it can be painted over in less than 24 hours. It is sold in 8-oz tubes packed in individual boxes. Made by **Sterling Paint & Varnish Co.,** 150 Commercial St., Malden 48, Mass.

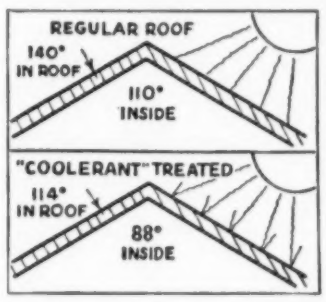
For more details circle NED-5832 on enclosed inquiry slip

CORRUGATED WRAPPING
can have printed surfaces

Brand name, trade mark, sales message or combination of these and other messages can be custom-printed on flexible corrugated wrap by Chippaprint Service. Both small and large users can use imprints of any one, two or three colors. Four all-over background designs are provided with individualized copy at breaks in pattern. Matching printed gummed tape is available. Service rendered by **Chippewa Paper Products Co.,** 2427 S. Rockwell St., Chicago 8, Ill.

For more details circle NED-5833 on enclosed inquiry slip

REFLECTIVE ROOF COATING
acts as insulating material



Heat reflecting qualities of large flakes of metallic aluminum in Roof Coolerant maintains below-roof temperatures as much as 26° F lower than conventional roofs. Large aluminum flakes are applied with liquid bond to create a seamless silvery blanket that throws back the sun's heat. Roof coatings are prevented from drying out and excessive contraction and expansion are eliminated. Developed by **Tropical Paint & Oil Co.,** 1150-1300 W. 70th St., Cleveland 2, O.

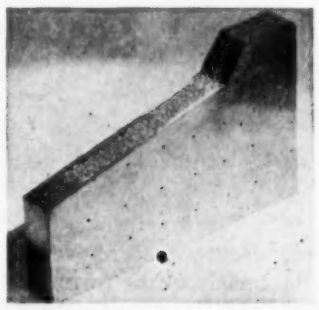
For more details circle NED-5834 on enclosed inquiry slip

PIPE SCALE REMOVER
reduces scale into gaseous state

Scale forming in pipes, evaporators, condensers, heat exchangers, water heaters and coils is quickly and safely removed with Rydlyme solvent. As illustration of solvent's noncorrosiveness, it can be poured onto scale particle held in the hand and quickly dissolves scale into harmless gaseous state without affecting skin. Water is safe for drinking after pipes are cleaned with solvent. Liquid is packaged in glass gallon-containers, four gallons per case. Formulated by **Apex Engineering Co.,** Dept. 2-A, 75 E. Wacker Dr., Chicago 1, Ill.

For more details circle NED-5835 on enclosed inquiry slip

METAL WEAR PLATE
porous center holds lubricant

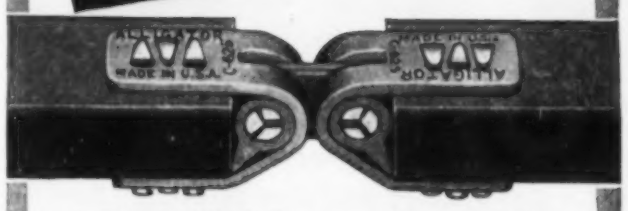


Large internal cavity of this "stored lubricant" metal wear plate is filled with an extremely porous, yet rigid metal sponge containing a lubricant. The completely enclosed sponge distributes the lubricant to either surface of the plate through pores in the cavity wall. Predetermined passages can be arranged in any configuration to meet the requirements of any application. Sponge keeps lubricant adjacent to surface-connected pores by capillary action and at the same time prevents collapse of the cavity under extreme pressures. Hardness and other properties of plate surface can be varied to suit the application. Made by **Michigan Powdered Metal Products Co.,** Northville, Mich.

For more details circle NED-5836 on enclosed inquiry slip

Now you can fasten V-belts by using

ALLIGATOR V-BELT FASTENERS



● Alligator V-Belt Fasteners and open-end (long length) V-belting in rolls will enable you to make up multiple V-belt drives for a wide variety of applications.

Available for B, C and D sizes of V-belting.

Not to be used for repairing endless cord V-belts.

Bulletin V-211 will give you complete details. A copy mailed on request.

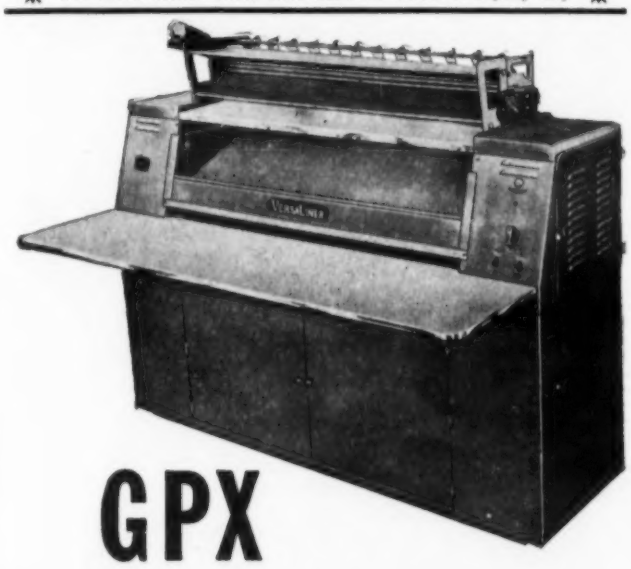
Order from your supply house

FLEXIBLE STEEL LACING COMPANY

4664 Lexington St., Chicago 44, Illinois

Also sole manufacturers of Alligator Steel Belt Lacing for flat conveyor and transmission belts and FLEXCO Belt Fasteners and Rip Plates for fastening and repairing conveyor belts.

For more details circle NED-5837 on enclosed inquiry slip



GPX

CUTS FEED BOARD COSTS

GPX plastic-faced plywood is an old hand at solving production problems. Peck & Harvey, a Chicago blueprinting and photographic equipment manufacturer, discovered GPX's economy, ruggedness and easy workability by using it for feed boards in their Versaliners. GPX, satin-smooth and armor-hard, resists acids, ignores abrasion, provides a snag-proof surface which offers extreme resistance to moisture.

This is only one example of versatile GPX at work. G-P offers expert technical assistance on any production problem you may have. Call your Georgia-Pacific representative or send coupon below.

A FEW PROVEN USES OF GPX—Match plates • Concrete forms Industrial tables, benches, lockers • Interior & exterior walls for freezers • Ducts • Drying boards • Humidity chambers • Freight cars • Exterior siding • Hobbies & crafts • Truck trailers • Anti-slip flooring.

GEORGIA—PACIFIC PLYWOOD COMPANY

616-6A North Capitol Way, Olympia, Wash.

OFFICES OR WAREHOUSES IN: Augusta, Birmingham, Boston, Chicago, Columbia, Detroit, Lancaster, Louisville, Memphis, Nashville, Newark, New Hyde Park, Olympia, Orlando, Philadelphia, Pittsburgh, Providence Raleigh, Richmond, Savannah, Vineland.

For complete data, fill in and mail this coupon *today*

Georgia-Pacific Plywood Company
Plastic Plywood Division
Marsh Street
Port Newark 5, N. J.

Please send me the GPX Use Folder.

NAME.....

FIRM NAME.....

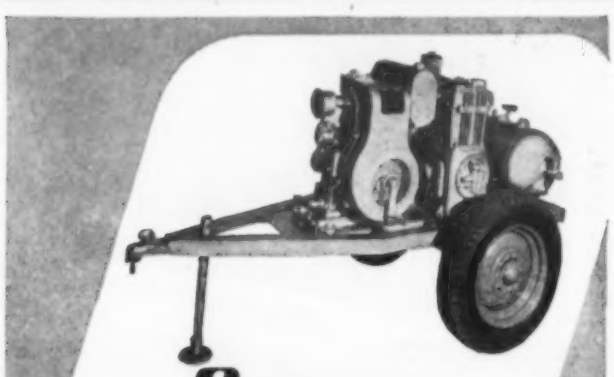
.....

FIRM ADDRESS.....

CITY.....STATE.....

POSITION.....

For more details circle NED-5838 on enclosed inquiry slip



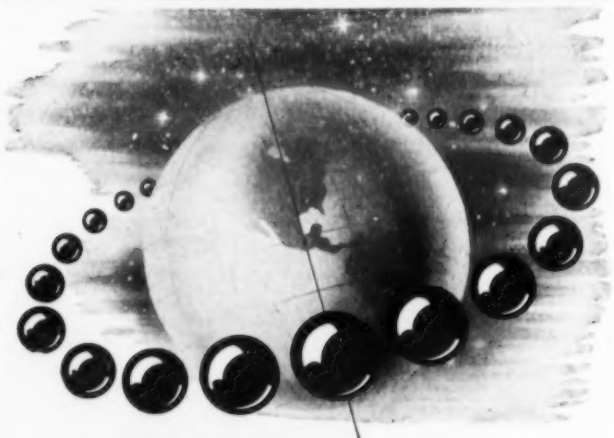
Quincy COMPRESSORS

GO WHERE THEY'RE NEEDED

Portable Quincy Compressors, ranging in size from 1 to 45 c.f.m. supply compressed air "on the spot" quickly and efficiently. Select from the Quincy line of portables . . . four types of mountings, gasoline engine or electric motor drive. Write today for details and latest prices. Quincy Compressor Co., Dept. NE-24, Quincy, Illinois.

QUINCY COMPRESSOR CO., Quincy, Illinois
Branch Offices: New York • Philadelphia • Chicago
St. Louis • Dallas • San Francisco

For more details circle NED-5839 on enclosed inquiry slip



Around the World it's

HOOVER BALLS

made of

CHROME STEEL - CARBON STEEL - STAINLESS STEEL BRASS - BRONZE AND MONEL METAL

"America's Foremost Ball Manufacturer"

HOOVER BALL AND BEARING CO.
Ann Arbor, Michigan

For more details circle NED-5840 on enclosed inquiry slip

SAVED $3,044 OVER COST OF ELEVATOR

WRITE— for Suggestion. Give height, floor to floor and horizontal space available . . . Also maximum unit load.

- Maintenance — Zero
- Operating Cost — Negligible
- 500% Faster Loading and Unloading
- Safer than Elevator
- Flexible, with two-way Controls
- Prompt Delivery — Easy Installation

METZGAR CO.

MFGRS. OF WHEEL & ROLLER GRAVITY & LIVE ROLLER CONVEYORS • POWER BELT CONVEYORS • SWITCHES • ACCESSORIES • REEL DOLLIES & END-WOOD WHEELS.

METZGAR CONVEYORS

416 Douglas N.W.

GRAND RAPIDS 4, MICH.

For more details circle NED-5841 on enclosed inquiry slip

New Processes & Materials

PROTECTIVE COATING withstands variety of chemicals

Making use of a plastic that is effective at temperatures from subzero to 400° F, Leak Lock protective coating withstands attack by wide variety of chemicals. It retains its flexibility when dry and does not crack. Adhering tenaciously to most surfaces, coating can be used to protect process equipment, piping, tanks, fittings, etc. No curing is required and application can be by brush, dip or spray. Made by **Highside Chemicals Co.,** 11 Colfax Ave., Clifton, N. J.

For more details circle NED-5842 on enclosed inquiry slip

SYNTHETIC ELASTOMER improves properties of rubbers

Small quantities of Hypalon S-2 chlorosulfonated polythene elastomer are now being produced in a pilot plant for evaluation of applications in automobile, wire and cable, protective coating, mechanical goods and other industries. This material is made by treating polythene resin with chlorine and sulphur dioxide. It is rubber-like and can be compounded and processed in conventional rubber machinery. Features include complete resistance to ozone in all forms, good resistance to abrasion and heat and high flex life. It can be blended with natural and synthetic rubbers and imparts many of its properties to the blends. It does not require carbon black for reinforcement and, therefore, can be fabricated for variety of uses without limitations as to color. Developed by **E. I. du Pont de Nemours & Co.,** Polychemicals Dept., Wilmington 98, Del.

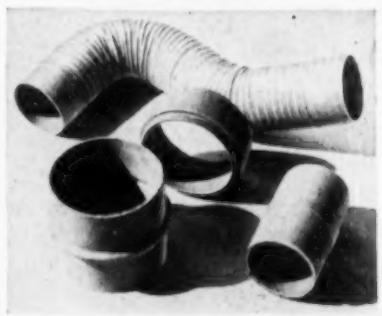
For more details circle NED-5843 on enclosed inquiry slip

FLOORING CEMENT forms hard, dense surface

Magnesium chloride and magnesium oxide combined with fillers and fine aggregates produce an industrial flooring cement that sets within a few hours to form a hard, dense and durable surface. Called Magna-Crete, it is supplied in dry form to be mixed on the job to a mortar consistency, then spread, leveled and finished by troweling. Cement has light weight, good bonding qualities, resistance to oils and greases and high structural strength. Made by **Flash-Stone Co.,** 3727 Pulaski Ave., Philadelphia 40, Pa.

For more details circle NED-5844 on enclosed inquiry slip

SILICONE-GLASS FIBER PRODUCTS resists temperature extremes, aging



Line of silicone rubber-impregnated Fiberglas materials has been expanded by addition of Arco-Sil No. 2184 material which withstands temperatures to 700° F, remains flexible at −125° F, and resists aging, ozone, most corrosive fluids and gases and abrasion. Material can be formed into both simple and complex shapes. Standard and custom-made parts available include helical wire-supported flexible ducting and tubing in all diameters for high and low pressures, convoluted and sleeve type flexible couplings for hot air ducts, hose for handling 700° F, 2000 psi air, die cut high temperature gaskets and fabric-covered sponged silicone seals. Material can be bonded to metal and can be fabricated with built-in T's, elbows, flanges and other special features. Made by **Arrowhead Rubber Co.,** Silicone Dept., Downey, Calif.

For more details circle NED-5845 on enclosed inquiry slip

SAVE AND SIMPLIFY By this Process of ELIMINATION and REDUCTION

The MIKRO-ATOMIZER

ELIMINATES: Air Separator • Bucket Elevator • Screw Conveyor

REDUCES: Headroom • Floor Space • Extra Handling or Equipment

If your need is for ultra-fine grinds requiring air classification rather than screening, the MIKRO-ATOMIZER is your complete answer. It is an entire system producing perfectly blended grinds in the lower micron range in a single pass at exceptionally low temperature rises.

With its built-in air separator, it is a 3-function machine, grinding, air-classifying and conveying in one operation. Slight adjustments permit varying degrees of fineness. If necessary, you can actually produce two degrees of fineness in one operation.

If you have ultra-fine grinding problems don't fail to investigate this 3-function MIKRO.

SEND FOR—special MIKRO-ATOMIZER bulletin

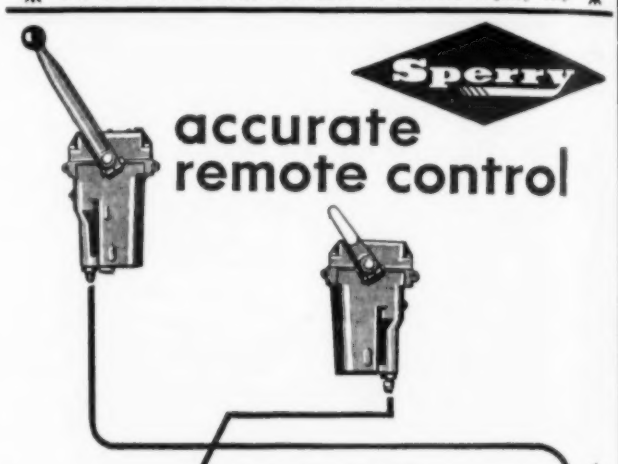
PULVERIZING MACHINERY COMPANY
28 Chatham Road Summit, New Jersey

1465

PRESERVE OUR HERITAGE: FAITH, FREEDOM AND INCENTIVE

MIKRO-PULVERIZER FINE
MIKRO-ATOMIZER ULTRA FINE
REG. U.S. PAT. OFF.
Also Makers of the MIKRO-COLLECTOR

For more details circle NED-5846 on enclosed inquiry slip



accurate remote control

A self-contained, hydraulic control, that delivers immediately to the receiver any force applied to the transmitter. Being completely independent of outside sources of power and due to the incompressibility of the hydraulic oil, the Sperry Remote Control System assures instantaneous precision operation of a remote mechanism.

WRITE FOR DESCRIPTIVE LITERATURE

SPERRY PRODUCTS, INC.
DANBURY, CONNECTICUT
REPRESENTATIVES IN PRINCIPAL CITIES

For more details circle NED-5847 on enclosed inquiry slip

USE ACME ELECTRIC DRY-TYPE TRANSFORMERS TO

- ELIMINATE DOUBLE WIRING
- DISTRIBUTE POWER AT HIGH VOLTAGE
- PROVIDE 3 WIRE SECONDARY CIRCUITS
- OPERATE 120 VOLT EQUIPMENT FROM POWER CIRCUITS
- BOOST VOLTAGE
- BALANCE VOLTAGE
- INSULATE CIRCUITS

Available in sizes 1/10 to 167 KVA, 1 phase 60 cycle; 9 KVA to 500 KVA 3 phase 60 cycle. Class "A" and Class "B" insulation.

Write for Catalogs

ACME ELECTRIC CORPORATION
306 WATER STREET • CUBA, N. Y.

Acme ACME Electric TRANSFORMERS

For more details circle NED-5848 on enclosed inquiry slip

Waste Hours...or Work Hours in Your Plant?

Why Overwork Three Men This Way... When One Man Does It Easier This Way

CUT MATERIALS HANDLING COSTS 50% OR MORE!

Year after year, more and more companies have come to learn that Automatic "101" TRANSPORTERS cut their materials handling costs as much as 50% or more, while adding valuable man-power in man-hours saved.

"101" TRANSPORTERS are sturdy, too. To our knowledge every TRANSPORTER manufactured is still in service... and tens of thousands have been built.

FREE PROOF in Your Own Plant

to prove you can add man-hours without increasing workload of personnel!

But don't take our word for it! Put a "101" Transporter to the test . . . put it over the severest hauling hurdles in your own plant, absolutely free and without obligation! Write today and we'll arrange for your 3 days' trial. First come, first served. No obligation to buy . . . no strings attached.

"101" Transporter — A PRODUCT OF AUTOMATIC — Lightens LIFE'S LOADS

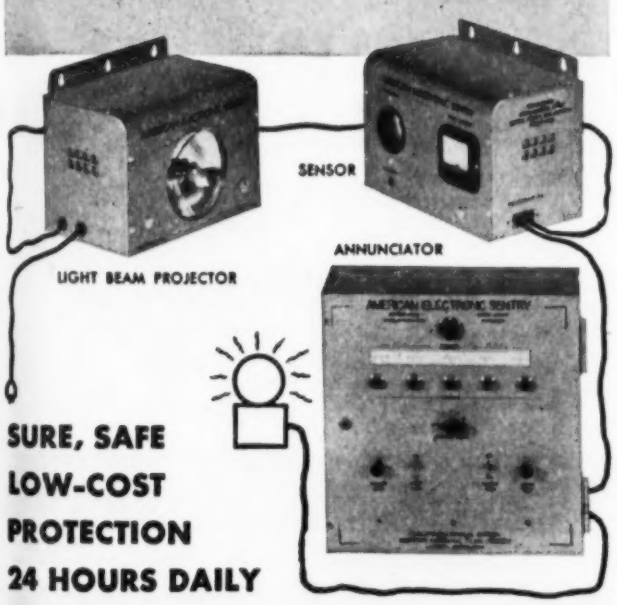
Trade Marks Reg.

Automatic® 61 W. 87th Street, Dept. H-2, Chicago 20, Illinois

For more details circle NED-5849 on enclosed inquiry slip

You Can Spot FIRE

BEFORE IT REALLY GETS STARTED with NEW ELECTRONIC DETECTOR!



SURE, SAFE LOW-COST PROTECTION 24 HOURS DAILY

You can spot fires without delay with the American Electronic Sentry providing automatic fire detection. The first wisp of smoke across the light beam flashes the alarm . . . warns of fire before the sprinkler heads go into action. This new alarm system virtually ends the danger of destructive fires in warehouses, hospitals, schools and factories.

AUTOMATIC IN USE . . . EASY TO INSTALL

The American Electronic Sentry System "watches" an area about 150 ft. x 30 ft. with each pair of Light-Beam Projector and photo-electric Sensor. Additional pairs cover larger areas.

Smoke is "reported" to an Annunciator Panel which may be located nearby, or up to 2 miles away, connected by inexpensive wiring. The signalling device may be horn, bell, siren or light located where most useful. Current consumption is low, about 50 watts a unit.

NO "ACCIDENTAL" FAILURES

The Projector has a built-in supervisory circuit to warn of failures. Automatic voltage regulation. Any power interruption sets off alarm.

WRITE FOR FULL DETAILS Full information on the American Electronic Sentry may be obtained promptly and without obligation by writing to...

Approved By Factory Mutual Laboratories

FM

ELECTRONICS DIVISION
AMERICAN ENCAUSTIC TILING CO., INC.
901 Kenilworth Ave., Lansdale, Pennsylvania

For more details circle NED-5850 on enclosed inquiry slip

New Processes & Materials

DUAL TEMPERATURE INSULATION for high-low temperature pipe lines

Low temperature or alternate high and low temperature pipe lines can be effectively insulated by dual temperature insulation made of fibrous glass bonded with a thermosetting binder. It is preformed in easy-to-apply segments to fit all standard pipe and tubing sizes. A vapor barrier of asphalted kraft paper and aluminum foil laminations adhered to Fiberglas insulation is incorporated. Joints are sealed by 4-in. strip of vapor barrier paper. Outdoor use is possible with 35-lb roofing felt jacket for weather protection. Fiberglas Aerocor, a flexible blanket insulation, is recommended for valve and fitting insulation. Made by **Owens-Corning Fiberglas Corp.**, Nicholas Bldg., Toledo 1, O.

For more details circle NED-5851 on enclosed inquiry slip

CONCRETE RESURFACER applied without chipping surface

Bonding securely to old concrete up to a feather edge, Ruggedware resurfacer can be applied without chipping the concrete. It is resilient, yet stands up under heavy pounding and does not grind away or crack. A ½-in. layer is used as an overlay on concrete, brick, stone, composition, steel or wood surfaces, indoors or out. Application can be by unskilled personnel. Made by **Flexrock Co.**, 3667 Cuthbert St., Philadelphia 4, Pa.

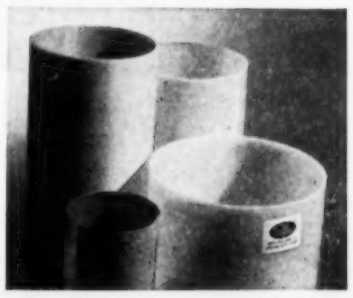
For more details circle NED-5852 on enclosed inquiry slip

CONVEYOR BELT carries abrasive or oily materials

Sharp edged materials such as steel scrap, tote pans, steel stampings, cut glass, artillery shells, cartridges and other products that are abrasive or oily in nature can be conveyed easily with armadillo Protecto-Coat conveyor belting. Made in either of two duck weights, 37½ or 39 oz, product is an oil buff, stitched canvas belt with extremely hard glass-like, yet flexible coating which sheds any type oil. Coating is resistant to abrasive, digging or cutting action. Made by **Main Belting Co.**, Room 190, 1241 Carpenter St., Philadelphia 47, Pa.

For more details circle NED-5853 on enclosed inquiry slip

PLASTIC TUBING is corrosion-resistant and can be sawed, drilled and threaded



Lightweight high strength, corrosion resistant tubing constructed of Fiberglas-reinforced thermosetting plastic is now available for use as fuel dispensing lines, standpipes and vent tubes, oil gathering lines, irrigation lines, salt-water piping, electrical conduits and natural gas pipelines. Pipe is nonporous and resists weather, soil, corrosive liquids and gases including dilute and fatty acids, alkalies, salts, hydrocarbons, oils, greases, alcohols and gasoline. Temperature stability for continuous operation ranges between −60° F to 230° F.

Tubing is available in 4 to 10-in. OD with wall thicknesses ranging from 0.030-in., and in 36-in. OD on order. It has 35,000 psi tensile and 65,000 psi flexural strength and burst pressure range to 3000 psi. Straight 20-ft sections are coupled by cemented sleeves. Plastic can be sawed, cut, drilled, threaded or joined. Made by **Reflin Co.**, Dept. B-11, 8525 Higuera, Culver City, Calif.

For more details circle NED-5854 on enclosed inquiry slip

JABSCO SELF PRIMING PUMPS

Patented and Patents Pending

the pump with the DUPONT NEOPRENE impeller (oil resistant)

BRONZE, STAINLESS STEEL & IRON CONSTRUCTION —CAPACITY TO 50 GALLONS PER MINUTE

1 MORE CAPACITY—for its weight, size and price.
2 SELF-PRIMING—starts instantly with high suction lift.
3 ONE MOVING PART—tough, long-lived.
4 GEARLESS—impeller outlasts metal gears.
5 TROUBLE FREE—simple construction.
6 ECONOMICAL—low cost—low maintenance.

LIQUID TRANSFER AND CIRCULATING FOR ALL INDUSTRIES

JABSCO PUMP COMPANY
2031 N. Lincoln Street • Burbank, California

For more details circle NED-5855 on enclosed inquiry slip

5 BIG REASONS

Why Wells Band Saws slash metal cut-off costs

Above is the Wells No. 8, shown with wet cutting system. It offers a capacity of 8" x 18", rectangular, 8" dia., rounds.

1. Fast, Accurate Action
2. High Job Productivity
3. Low Operating Cost
4. Real Blade Efficiency
5. Long, Dependable Service

YOU are always ahead when you handle your cut-off jobs on "Wellsaws." The Wells Band Sawing method will not only reduce your operating costs, but also give you greater job efficiency—better cuts, and real dependable service. There is a size and type for every need and every budget. Capacities range from 3½" x 6" to 48" x 48". Write for descriptive literature.

Wells Saws — Products by Wells are Practical

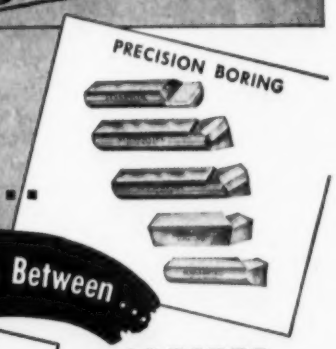
METAL CUTTING BAND SAWS

WELLS MANUFACTURING CORPORATION 1313 HARDING ST., THREE RIVERS, MICHIGAN

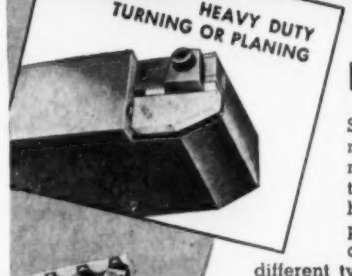
For more details circle NED-5856 on enclosed inquiry slip

KENNAMETAL Carbide TOOLING

For the EXTREMES...



and EVERYTHING in Between...



GREATER PRODUCTIVITY!

Sturdy, long-wearing Kennametal tools enable men and machines to do more, in less time, at less cost. We have hundreds of performance reports to prove it—describing a wide variety of jobs on different types of materials. On many of these jobs Kennametal tooling pays for itself in savings effected in grinding, alone—not counting reduced tooling costs, and higher production rates attained. Let us demonstrate.

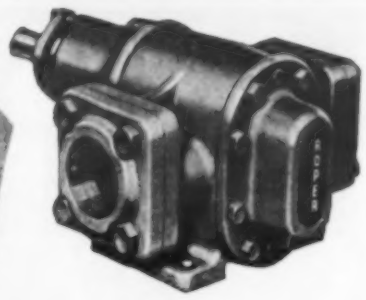
SEND FOR CATALOG 51

KENNAMETAL Inc., Latrobe, Pa.

For more details circle NED-5857 on enclosed inquiry slip

Small Compact SERIES "K"

ROPER PUMPS KEEP POWER COSTS DOWN



With capacities from 3/4 to 50 G.P.M., Roper Series "K" Pumps are adaptable to a wide range of jobs pumping clean liquids. Designed with the Roper venturi suction and discharge principle, they have high volumetric efficiency — energy loss from turbulence, cavitation, and friction is held to a minimum — power costs are reduced. Packed box or mechanical seal, with or without relief valve as desired.

3/4 TO 50 G.P.M.—PRESSURES TO 150 P.S.I.

ROPER Rotary Pumps

Send for Catalog

Detailed facts on Series "K" Models plus data on other pumps in the Roper line.

GEO. D. ROPER CORP.
666 Blackhawk Park Ave., Rockford, Illinois

For more details circle NED-5858 on enclosed inquiry slip

WHICH DO YOU DO?

LOADING & UNLOADING

SHEET FEEDING

WORK POSITIONING

DIE HANDLING

RAYMOND

PORTABLE Hydraulic ELEVATING TABLE

FITS ALL FOUR!

No table has so many practical uses as this RAYMOND Portable Hydraulic Elevating Table! Use it for positioning or handling throughout the plant . . . see how it lightens your work load. RAYMOND Hydraulic Elevating Table has sturdy 30" square top which can be rotated when desired.

Convenient foot pump simplifies raising and lowering, leaves operator's hands free. Smooth-rolling casters make table highly portable. Floor lock holds it securely in place. Standard Model elevates from 28" to 44"; Telescopic Model from 28" to 50". Both models have 2,000 lb. capacity.

SEND FOR BULLETIN 232 . . . it gives you the facts on this RAYMOND Portable Hydraulic Elevating Table. Write for it today.

RAYMOND

ELECTRIC INDUSTRIAL TRUCKS • HYDRAULIC ELEVATING EQUIPMENT

The RAYMOND CORPORATION
Formerly LYON-Raymond Corporation
4169 Madison St., Greene, N.Y.

For more details circle NED-5859 on enclosed inquiry slip

New Literature and Catalogs

Dust Collectors

Pangborn Corp.—Carbon black, cork, fine wood, graphite, pigments, lime, soap and metal oxides are some of the dusts that can be collected for reclaiming or waste disposal by cloth bag dust collectors described in 8-page illustrated bulletin 914. Sizes are available to handle practically any volume of exhaust air.

For more details circle NED-5860 on enclosed inquiry slip

Machine Tool Controls

Electric Controller & Mfg. Co.—"Reversing Control for Planers" is 8-page illustrated bulletin on system that uses impedance-electronic limit switches on equipment where frequent reversal is encountered. Quick stopping is assured at all times.

For more details circle NED-5861 on enclosed inquiry slip

Aluminum Cable Connectors

Thomas & Betts Co.—Featured in 32-page illustrated catalog 67 "T & B Method Compression Joints for Copper and Aluminum Cable" are Waterseal lugs for small diameter armored Navy cables, terminals for aluminum aircraft cable, one and two-hole lugs, two and three-way connectors, taps, upright lugs and special terminals for cables from No. 8 through 2000 mcm. Table shows government and corresponding company catalog numbers.

For more details circle NED-5862 on enclosed inquiry slip

Air, Steam & Vapor Purifiers

V. D. Anderson Co.—Hi-eF purifier used to clean up small pipelines carrying live or exhaust steam, vapors and air is subject of 6-page illustrated bulletin 500 "Take a Big Bite Out of Steam and Vapor Processing Costs." Application of unit can be to steam drums, ejectors, kettles, heat exchangers, intercoolers for gas compressors, air tools, etc. Typical installations, specifications and prices are given.

For more details circle NED-5863 on enclosed inquiry slip

Sling Chains

American Chain & Cable Co., American Chain Div. —Illustrations and specifications of different types of Acco Registered sling chains are included in catalog DH-314. Data on regular types of Endwelder sling chain, Registered sling chain with foundry hooks and Ox-Bow magnet chains are included.

For more details circle NED-5864 on enclosed inquiry slip

Machine Washing of Metal

Oakite Products, Inc.—"8 Things To Look for When You Wash Metal by Machine" is title of 16-page illustrated booklet which reviews specialized materials offered for use in metal washing equipment. The job each performs is reviewed and helpful suggestions on selection and operation of equipment are given.

For more details circle NED-5865 on enclosed inquiry slip

Power Conveyor Applications

Harry J. Ferguson Co.—Where and how Ferguson Streamliner power conveyors are used in various industries is subject of 32-page illustrated brochure 302. Horizontal, portable, inclined, floor-to-floor, power and steel wire mesh belt conveyors and other equipment are depicted.

For more details circle NED-5866 on enclosed inquiry slip

Storage Racks

Barrett-Cravens Co.—Drums, barrels, crates, bins, skids and pallets are among products that can be placed on Barrett steel storage racks, described and illustrated in 12-page bulletin 5221. Racks multiply floor storage capacity, prevent breakage and damage and keep stock visible and accessible.

For more details circle NED-5867 on enclosed inquiry slip

Self-Sticking Industrial Products

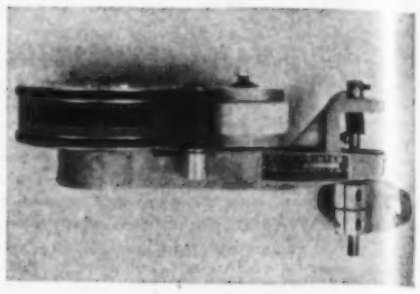
W. H. Brady Co.—50-page illustrated catalog of wire markers, pipe markers, safety signs, Scotchlite reflective signs, finishing masks and stencils and printed roll tape is yours for the asking. There are over 2500 stock Quik-Labels in numbers, letters and symbols as well as colored and Hi-Heat resistant labels. These pressure-sensitive signs, markers and labels will adhere to practically any surface. Production, identification, inspection, informative labeling and sealing problems are discussed.

For more details circle NED-5868 on enclosed inquiry slip

CODE, DATE and MARK AUTOMATICALLY on your CONVEYOR LINE with the "WHIPPET" MARKER

The "Whippet" marks filled bags, cartons, boxes, rolls, cans, etc. with quickly interchangeable rubber type. Inking is through a felt roller that has self-contained reservoir. No installation problems—readily adaptable to your present conveyor system.

The "Whippet" Marker is just one of Industrial's coding and marking machines designed for more efficient marking and movement of materials on production lines. Let us help you with your problems—write today. "FREE" Catalog upon Request.



THE INDUSTRIAL MARKING EQUIPMENT COMPANY, INC.
454 Baltic Street, Brooklyn 17, N.Y. Dept. N.E.D.
Phone MAin 4-2601

For more details circle NED-5869 on enclosed inquiry slip

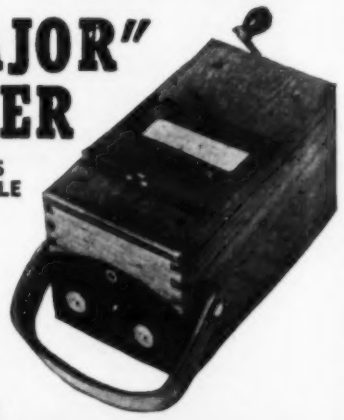
IMMEDIATE DELIVERY Why wait?

A SMALL SIZE, LIGHT WEIGHT, CONSTANT PRESSURE, SLIP CLUTCH, D. C. GENERATOR TYPE INSULATION TESTER

. . . but with long scale as in large instruments at a LOW PRICE WHY PAY MORE?

New "MAJOR" MEGOHMER

RANGE: 0-50 MEGOHMS WITH EXTRA OHM SCALE 0-10,000 OHMS OR 0-30 OHMS



True ohmmeter movement independent of generator voltage. Furnished with leather carrying case and 6 ft. test leads.

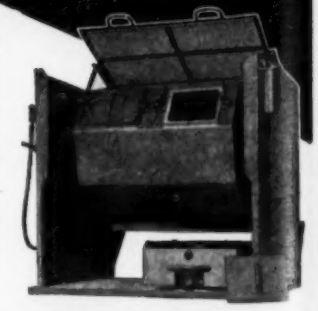
Write for Bulletin 465

HERMAN H. STICHT CO., INC.
27 PARK PLACE, NEW YORK 7, N. Y.

For more details circle NED-5870 on enclosed inquiry slip

ROTO FINISH gives you precision finishes mechanically... at lower cost

The original Roto-Finish can effectively convert your precision finishing operations from costly hand methods to a low cost mass production mechanical process. Only at Roto-Finish can you get the recommendations of the engineers who developed the processes for precision barrel finishing and have continued to improve them for many years . . . results guaranteed to be the same in your plant as in our laboratory.



A copy of this fact-packed catalog is waiting for you. Write today.

DW 45-36-2

HERE'S WHAT ROTO-FINISHING CAN DO FOR YOU

- Speeds up the production and efficiency of descaling, and surface improvement operations, because you finish more parts at one time and use less manpower.
- Cut finishing costs as much as 80%.
- Mechanically produces uniformly fine finishes to exact tolerances.
- Reduce maintenance expenses.

Roto-Finish COMPANY
associated with The Sturgis Products Co.
3702 Milham Rd., Kalamazoo, Mich., P. O. Box 988, Ph. 3-5578
ORIGINATORS OF THE ROTO-FINISH PROCESS

For more details circle NED-5871 on enclosed inquiry slip

• If you fabricate plastics here's a vital new manual for you! Solves machining and forming problems, gives tool speeds and punch press data. Helps cut waste of material and time; simplifies ordering. Contains latest shop-tested information. *Write for your free copy now!*

C-D-F has sales engineers in principal cities.

Continental-Diamond Fibre Company

main office: NEWARK, DELAWARE, U.S.A.

▲ For more details circle NED-5872 on enclosed inquiry slip ▲

The Johnson Joint has solved many design and production problems as nothing else can. And the Type L, shown above, is helping to fit it into more applications all the time. It has lugs cast on body to permit simple rod support, an arrangement that both simplifies installation and assures proper alignment. Completely packless, self-lubricating and self-adjusting, the Type L Johnson Joint is used on calenders, dryers, mills, etc. — wherever steam or liquids must be admitted to rotating machine parts.

Write for new catalog

The Johnson Corporation

812 Wood St., Three Rivers, Mich.

▲ For more details circle NED-5873 on enclosed inquiry slip ▲

• It describes and illustrates all models Bin-Dicator bin level indicators for thin or thick walled bins, inside or outside location and suspended interior installation in tanks, silos, hoppers and bins. Also describes Bin-Flo Aerator for keeping pulverized materials moving. Many wiring diagrams. Write for this helpful new catalog.

THE BIN-DICATOR CO.

13946-A Kercheval • Detroit 15, Mich.

▲ For more details circle NED-5874 on enclosed inquiry slip ▲

New Literature & Catalogs

Fans & Blowers

Chelsea Fan & Blower Co.—Complete specifications, dimensions, installation diagrams and photographs, are given for 30 fan types in over 300 sizes in fan and blower catalog No. 400. Information on selection and installation of fans for industrial, commercial and residential uses is provided.

▲ For more details circle NED-5875 on enclosed inquiry slip ▲

Processing Equipment

Sprout, Waldron & Co.—Condensed information on size-reduction, mixing and blending, bulk materials handling, product classification, pelleting and special equipment is contained in 12-page illustrated bulletin 44. Variations in equipment to meet special needs are covered.

▲ For more details circle NED-5876 on enclosed inquiry slip ▲

Belting Data

Graton & Knight Co.—40-page illustrated catalog and application manual No. 101 is guide to the proper selection, engineering and application of belting. There are charts and tables of horsepower ratings, belt speeds and motor recommendations. Information is given on flat leather belting, belt dressings, link and round leather belting, v-belts, group and controlled tension drives and endless belt making.

▲ For more details circle NED-5877 on enclosed inquiry slip ▲

View of a Company

Morrison Steel Products, Inc.—History of this 39-year-old firm, the products it manufactures, the industries it serves and the problems its plant and personnel can solve are given in the folder entitled "The Story of Morrison." Its Contract Div. is equipped to supply metal stampings and assemblies from the small and simple to the large and complicated.

▲ For more details circle NED-5878 on enclosed inquiry slip ▲

Corrosion Resistant Valves

Rockwell Mfg. Co.—35-page service bulletin V-217 describes types, sizes, operation and features of Rockwell-built Nordstrom corrosion resistant valves, made in various types and alloys. Tables show about 175 different chemicals with recommended alloy valves and lubricants. Over 100 photos, sectional and dimensional drawings are included.

▲ For more details circle NED-5879 on enclosed inquiry slip ▲

Fractional Horsepower Gearmotors

General Electric Co.—Sixty-one standard fractional horsepower gearmotors are listed and their applications given in 8-page illustrated bulletin GEA-5678. It outlines a simple method of determining correct horsepower requirements with the use of an ordinary pipe wrench and fish scale. Descriptions, cut-away drawings, dimension tables and maintenance pointers are included.

▲ For more details circle NED-5880 on enclosed inquiry slip ▲

used as original equipment

in DAUER Bonderite Washers

1. Lower first cost
2. Simplified and less costly installation
3. Take less space in tank
4. Higher heat transfer rate
5. No pipe joints in solution

Send for complete technical manual and descriptive Bulletin No. P57.

PLATECOIL Division KOLD-HOLD MFG. CO. LANSING 4, MICHIGAN

▲ For more details circle NED-5881 on enclosed inquiry slip ▲

MUELLER BRASS CO. ALLOYS FOR AVIATION'S TOUGHEST APPLICATIONS

803 • "803" metal is a high silicon iron-copper bronze that is ideally suited for roller bearing cages and other specialty parts in jet aircraft. It is machinable and ductile. At temperatures up to 500° F., "803" is non-galling and retains its excellent mechanical properties.

"600" SERIES • "600" series bearing bronzes contain no tin. They can be forged into relatively complicated shapes that require little or no machining. "600" series metals have a low coefficient of friction and a high tensile strength. They resist wear and corrosion, factors that make "600" series metals highly desirable for parts on hydraulic equipment, actuators and instruments in jet aircraft.

TUF-STUF • These aluminum bronze alloys are widely used for jet aircraft parts that really must stand up. TUF-STUF alloys are corrosion resistant, strong and light and long-wearing. They resist oxidation even at high temperatures. TUF-STUF alloys are available as forgings, rods and screw machine parts.

82-B

MUELLER BRASS CO. PORT HURON 26, MICHIGAN

▲ For more details circle NED-5882 on enclosed inquiry slip ▲

Hanna unitite Valves

YOU WANT a valve you can *depend* upon to operate faithfully day after day, month after month, year after year—without repacking . . . without adjustment . . . with nothing more than lubrication.

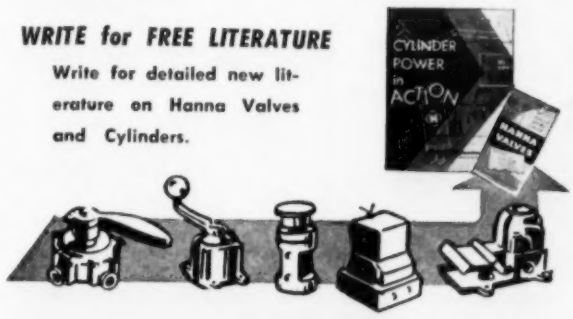
A running test under normal operating conditions shows that a Hanna Unitite Valve is still "going strong" after *10 million cycles of operation,* and should be good for *another 10 million.* Based on eight cycles per minute for an eight-hour day, this would represent 20 years of care-free service!

This is not surprising, for Hanna Unitite Valves are made of superior quality materials and parts. They are packless and permanently tight, protected from dust and abrasive matter by a Neoprene cap, and operate with a patented disc movement.

Unitites are designed for 3-way or 4-way operation, for air, oil or water, up to 250 psi. in three mounting styles.

WRITE for FREE LITERATURE

Write for detailed new literature on Hanna Valves and Cylinders.



Hanna Engineering Works

HYDRAULIC AND PNEUMATIC EQUIPMENT . . . CYLINDERS . . . VALVES . . . RIVETERS

1759 Elston Avenue, Chicago 22, Illinois

▲ For more details circle NED-5883 on enclosed inquiry slip ▲

SYNTRON
SHAFT SEALS
FOR PUMPS • COMPRESSORS • TURBINES
ENGINES • MIXERS • MACHINES
PROPELLER SHAFTS

Self-contained, self-lubricating, Easy-to-install units that provide fully automatic, self-adjusting, sealing action. Easy on power. Easy on shafts.

If your problem is hard-to-handle liquids, leakage, shaft wearing conditions or maintenance cost . . . Write for Free illustrated Folder.

SYNTRON CO.
405 Lexington Ave. Homer City, Pa.

For more details circle NED-5884 on enclosed inquiry slip

for
MARINE
COMMUNICATIONS
or
TANK
GAUGING

Relays BY GUARDIAN

Series
695 D. C.
RELAY

Leading manufacturers of marine radio equipment specify Guardian Controls. Perfected through twenty years of development and use in commercial travel ships and warcraft, they've justified their selection for a wide variety of intricate applications. For example, Guardian Controls have been used *exclusively* over more than fourteen years to transmit and receive remote readings on Telematic Liquid Level gauge systems. Leading pipeline companies and oil refineries report not a single service call since original installations made more than fourteen years ago. Let Guardian Controls serve you . . . *just as well!* Write for catalog.

GUARDIAN ELECTRIC
1626-G W. WALNUT STREET CHICAGO 12, ILLINOIS
A COMPLETE LINE OF RELAYS SERVING AMERICAN INDUSTRY

For more details circle NED-5885 on enclosed inquiry slip

Save 68%
OF DOCK HANDLING TIME*
with MOTO-TRUCS

A "twist of the wrist" does it.

*"A U.S. Navy Materials Handling Laboratory estimates that mechanized handling can cut 68% of the man hours needed for loading freight cars."
One user of 8 Moto-Truc Pallets cut the man hours unloading a boxcar from 16 to 4. Viz: —One man 4 hrs., formerly 2 men 8 hrs.

SEND FOR Bul. No. 51

THE MOTO-TRUC CO.
1953 E. 59th ST., CLEVELAND 3, OHIO
PALLET, PLATFORM AND HI-LIFT TRUCKS

For more details circle NED-5886 on enclosed inquiry slip

New Literature & Catalogs

Cold Process Built-Up Roofs

Hallemite Mfg. Co.—"Leading Industries Choose Halcoloid Homogenized Waterproofing" and "Specifications for Hallemite Cold Process Built-Up Roofs" are two illustrated folders on materials and procedures for roof resurfacing. Covering capacity, how to prepare the old surface and other information are given.

For more details circle NED-5887 on enclosed inquiry slip

Pressure Regulators

National Welding Equipment Co.—44-page illustrated brochure explains how a pressure regulator for oxygen, welding gas and other cylinders works and upon what basis of performance or specifications such equipment should be purchased. Specific details are well covered.

For more details circle NED-5888 on enclosed inquiry slip

Pyrometric Switches

Minneapolis-Honeywell Regulator Co., Brown Instruments Div.—Rotary, key and plug type pyrometric switches are illustrated and described in 12-page catalog 5800. Applications, pertinent circuits, dimensions, mounting details and switch circuits are included.

For more details circle NED-5889 on enclosed inquiry slip

Plating Rectifiers

Bart-Messing Corp.—12-page illustrated catalog No. 127 is entitled "A Guide to Better Plating Power." Described are selenium rectifiers and related equipment for supplying power for electroplating, electropolishing, electrocleaning and electrochemical needs.

For more details circle NED-5890 on enclosed inquiry slip

Machine Screws

Sterling Bolt Co.—Complete listing of steel machine screws which are available from stock is included in stock list. Wide assortment of sizes in round, fillister and truss heads is offered.

For more details circle NED-5891 on enclosed inquiry slip

Pump Castings

Meehanite Metal Corp.—20-page illustrated bulletin No. 36 is entitled "Meehanite Pump Castings." Tables and charts evaluate properties of castings from tests covering wear, resistance to acid corrosion, impact, erosion, pressure, etc.

For more details circle NED-5892 on enclosed inquiry slip

Galvanometers & Dynamometers

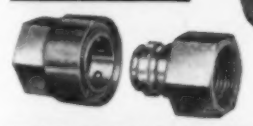
Leeds & Northrup Co.—20-page illustrated section ED of catalog E deals with complete line of standard galvanometers, dynamometers, direct current indicating amplifiers and accessories for use in null-balance or calibrated deflection measurements. Selection and circuit data are included.

For more details circle NED-5893 on enclosed inquiry slip

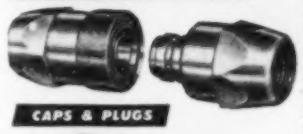
For more details circle NED-5894 on enclosed inquiry slip

Roylyn COUPLINGS
*FOR MANY VARIED INDUSTRIAL USES
☆ RAILROAD DIESEL FUEL LINES
☆ MARINE FUEL LOADING LINES
☆ TANK & LINE PRESSURE TIGHT CAPS
☆ PROCESSING & CHEMICAL INDUSTRIES
☆ LIQUID & AIR TRANSFER LINES
☆ LOADING VALVES & CONNECTIONS
☆ CLOSED HYDRAULIC SYSTEMS

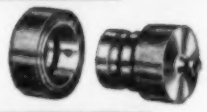
OPEN COUPLINGS



SELF-SEALING COUPLINGS



CAPS & PLUGS



HOSE ASSEMBLIES

Features like these mean CONNECT WITH ROYLYN!
★ SIZE RANGE . . . ¼ inch to 2½ inches. Up to 6 inches in some styles.
★ PRESSURE RANGE . . . 650 to 6600 P.S.I.
★ MATERIALS . . . Aluminum alloy, brass, carbon steel, alloy steel and stainless steel.
★ OPERATION . . . A simple "twist of the wrist"—NO TOOLS REQUIRED!
★ POSITIVE LOCK . . . Locks with a "snap" and positively will not uncouple with vibration, pressure or rotation of the connected lines.
★ SAFETY . . . Laboratory tests for extremes of heat, cold, vibration and years of hard service have proven its rugged reliability.
★ VERSATILITY . . . Open nipple can be used with self-sealing coupling to provide shut-off on one side only. Also open coupling can be used with self-sealing nipple to provide check valve action.

There is a Roylyn Coupling available for practically any type of flexible connection for air, water, hydraulic and chemical applications. Write today for free illustrated catalog and nearest dealer. Inquiries regarding available dealerships are invited.

Roylyn INCORPORATED
ROYLYN, Incorporated
1712 STANDARD AVE., GLENDALE 1, CALIF.
WUX, TWX GLENDALE, CALIF. 7158
Roylyn makes Good Connections for You!

For more details circle NED-5895 on enclosed inquiry slip

DoALL BAND TOOLS

FOR EVERY JOB—
ANY MATERIAL
IMMEDIATE
DELIVERY
FROM LOCAL
STOCK

CHOOSE from the world's most complete line of precision made, longer-lived band tools for every job: precision sawing, filing, grinding, polishing, honing, friction sawing and cutting of all types of ferrous and non-ferrous metals, plastics, rubber, leather, paper and other non-metallics.

DoALL band tools are packaged in the exclusive DoALL "strip out" container for safety, convenience and blade protection. They are available in a wide selection of lengths, widths and pitch to handle any job, any material. Remember any band sawing machine performs at greater efficiency with DoALL saw bands.

Call your local DoALL Sales-Service Store today and get immediate delivery on any type DoALL Band Tool. ASK FOR BULLETINS.

THE DoALL COMPANY • 254 N. Laurel Avenue • Des Plaines, Illinois

Special DoALL Band Tools
for the DoALL MP-20 Contour-Matic:

DIAMOND TOOTH BAND for sawing refractory, ceramic, vitrified, vitreous and geological materials. Diamond chips are set to stay longer.

LINE GRINDING BAND for "vertical grinding." Special band impregnated with tough, longer wearing abrasive stones. Ideal for die work.

33 SALES-SERVICE STORES
DoALL
INDUSTRY'S NEW TOOLS

For more details circle NED-5896 on enclosed inquiry slip

ALL PEERLESS MOTORS ARE
"Peerless Registered"

MORE than 90% of all Peerless Motors are custom manufactured to meet the specific operating requirements of the equipment with which they are to be used. So we "Peerless Register" every motor before shipment. The words "Peerless Registered" are a trademark, recorded in the U.S. Patent office. Only Peerless Motors can bear this phrase, and only Peerless Motors offer you this protection. This registration record is assurance to both you and your customer that the Peerless Motor has been properly designed for your equipment so as to give best possible performance and long, satisfactory service. And the registration record makes possible the quick identification of any Peerless Motor—anywhere.

THE PEERLESS ELECTRIC CO., WARREN, OHIO
Manufacturers of Quality Motors Since 1893
Single Phase • Polyphase • Direct Current • ¼ to 15 H.P.

Peerless-Electric MOTORS·FANS·BLOWERS

▲ For more details circle NED-5897 on enclosed inquiry slip ▲

WEATHERPROOF TAPE
replaces outdoor paint

Appleton Neon Sign Co., Wisconsin, solved a costly maintenance problem by blacking out non-illuminated sections of neon tubes with Polyken waterproof tape No. 214 instead of paint, which weathered off. In the picture above, the sections have already been blacked out with No. 214, and a worker is shown using another Polyken tape, exclusive polyethylene No. 822, to splice electrodes that will carry over 6,000 volts.

Write Polyken, Dept. NEF, 222 W. Adams St., Chicago 6, Ill., for free booklet, "Tape is a Tool."

Polyken®
INDUSTRIAL TAPES
Polyken Industrial Tape, Department of Bauer & Black, Division of The Kendall Company

▲ For more details circle NED-5898 on enclosed inquiry slip ▲

ARMSTRONG BROS.
Better PIPE TOOLS

Reversible Ratchet STOCKS and Adjustable DIES

Exceptionally convenient where space is limited, this stock simplifies pipe threading close to walls, in corners and wherever operating room is restricted. With adjustable dies (cut exact, over or under size threads) it is an ideal tool where valves and fittings are being installed or maintained.

"ARMSTRONG BROS." Adjustable Dies are of special Vanadium Tool Steel, have "backed-off" teeth, correct cutting angle, ample chip clearance and correct throat angle. They start and cut easily, hold their sharpness and "spin" off pipe without jamming or tearing threads.

Write for Catalog

ARMSTRONG BROS. TOOL CO.
"The Tool Holder People"
5245 W. ARMSTRONG AVENUE • CHICAGO 30, ILL.

▲ For more details circle NED-5899 on enclosed inquiry slip ▲

New Literature & Catalogs

Barrel Finishing Compounds

Blue Magic Chemical Specialties Co.—Characteristics, applications and advantages of various Blue Magic products are listed in catalog containing bulletins 1, 5, 11, 12 and 221. Case histories of time savings are outlined. Compounds in concentrated paste and powder forms for deburring, cleaning, polishing, burnishing and lusterizing ferrous and nonferrous parts that can be barrel tumbled are listed.

▲ For more details circle NED-5900 on enclosed inquiry slip ▲

Precision Stamping Facilities

Detroit Stamping Co.—Range of production equipment for high volume, intricate precision stampings is described in 6-page brochure "De-Sta-Go Multi-Stamping." Information on advantages, limitations and specialties is given, along with photographs of stampings and equipment.

▲ For more details circle NED-5901 on enclosed inquiry slip ▲

Preventive Maintenance

Westinghouse Electric Corp.—Complete outline of a preventive maintenance program for any industry is given in 28-page booklet. A suggested schedule of work and cleaning on power equipment is presented in chart form. All essential information on preventive maintenance for turbines, generators, switchboards, motors, controls and much other electrical apparatus is given.

▲ For more details circle NED-5902 on enclosed inquiry slip ▲

Maintenance Coatings

United Laboratories, Inc.—Materials for skid-proofing, rust prevention, painting over damp areas, weatherproofing and decoration of exterior masonry, interior waterproofing, painting hot surfaces, protection against acids, chemical fumes and other special maintenance work are described in 4-page illustrated bulletin 400. Problems are listed with suggestions as to solution.

▲ For more details circle NED-5903 on enclosed inquiry slip ▲

Unit Heater Maintenance

Industrial Unit Heater Association—The care and maintenance of steam and hot water unit heaters is covered in 4-page illustrated bulletin No. 12. It presents installation essentials, outlines maintenance steps and discusses system corrosion.

▲ For more details circle NED-5904 on enclosed inquiry slip ▲

Pressure-Sensitive Tape Uses

Minnesota Mining & Mfg. Co.—How six Scotch brand pressure-sensitive tapes, Nos. 600, 610, 700, 710, 250 and 800, can be used for various box sealing jobs is outlined in 4-page folder. Use of tape on manual, semiautomatic and fully automatic dispensing and sealing equipment is shown. Table lists tape specifications.

▲ For more details circle NED-5905 on enclosed inquiry slip ▲

LOK-THRED
can't shake loose

Engine builder anchors vibration points with LOK-THRED

LOK-THRED's extra strength and more positive locking action provide *better* answers to many vibration-fastening problems. For example, in this lightweight, air-cooled gasoline engine, manufactured by Power Products Corp., Grafton, Wisc., the cylinder and carburetor assemblies are held in place by LOK-THRED studs, anchored as shown in the cutaway view above. Subject to vibration through the life of the engine, these studs provide extra strength in both tension and torsion . . . actually *become tighter in service.* LOK-THRED bolts provide positive locking on the connecting-rod assembly.

WRITE TODAY FOR LOK-THRED BOOKLET!

National PRODUCTS
THE NATIONAL SCREW & MFG. CO.
2440 East 75th St., Cleveland 4, Ohio

▲ For more details circle NED-5906 on enclosed inquiry slip ▲

MAINTENANCE MEN!
GET THE FULL STORY ON HANNIFIN'S
NEW *Pilot-Master* Air Control Valves!

Fewer Valves to Stock. Same valve operates either 2-way or 3-way, normally open or normally closed. 4-way valves also available. Pilot valves for remote control.

Fewer Parts to Stock. Every moving part of main or "master" valve fits in an easily removable cartridge. NO SPRINGS! Two sizes of cartridge fit all 5 valve sizes. Pilot heads (solenoid or pressure operated) fit any size valve.

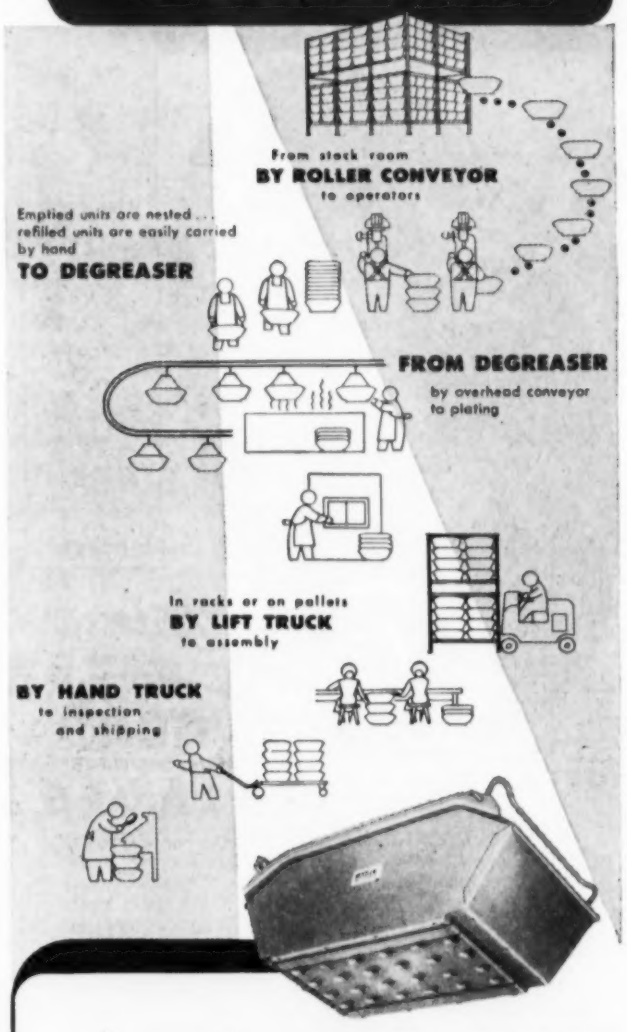
Solenoids Easily Serviced. The specially designed solenoids can be disassembled to replace the coil, or to install a coil of another voltage.

All Sizes From ¼" to 1¼" I.P.S.
Pressures From 15 to 150 P.S.I.
Write for Bulletin 231 and get the complete story!

HANNIFIN
Hannifin Corporation • 1127 S. Kilbourn Ave. • Chicago 24, Ill.

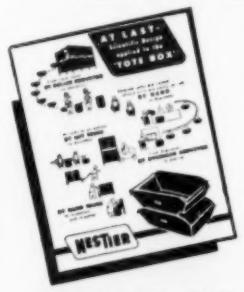
▲ For more details circle NED-5907 on enclosed inquiry slip ▲

Let's put the SPOTLIGHT on DEGREASING



In answer to the many demands, this new NesTier has been added to the NesTier System. Designed primarily for degreasing operations, the "lanced-bottom" NesTier permits rapid drainage without allowing even the smallest parts to slip through.

Now, there is no need to transfer parts for degreasing. The lanced-bottom box has all of the advantages of the standard NesTier—saving of space by the nesting and tiering features, ease of transportation and handling, adaptability to conveyor systems and the visibility and accessibility of contents.



TWO SIZES—No. 220—16 ga. steel, 22⅝" long, ¾" bails, weight 15 lbs. No. 175—18 ga. steel, 18¼" long, ¼" bails, weight 6 lbs. One piece welded construction, standard baked enamel, green.

EVERY MATERIALS HANDLING ENGINEER WILL WANT THIS BULLETIN!

Write for this bulletin describing the NesTier System, including complete specifications, racks, trucks, conveyor hangers, inserts. Our service includes complete engineering advice to systematize small parts handling in your plant.

THE CHAS. WM. DOEPKE MFG. CO., Inc.
Metal Specialties Division
Rossmoyne, Ohio

NESTIER
IT NESTS - IT TIERS

▲ For more details circle NED-5908 on enclosed inquiry slip ▲

Take an EXTRA Profit *with* **Weld-Bilt** *Experience in* Materials Handling!

WELD-BILT HYDRAULIC LIFT TRUCK. HANDLES MORE WORK, EASIER, FASTER.

One Midwest manufacturer saved $90,000 on equipment cost alone because he called in a Weld-Bilt engineer FIRST, before deciding on expensive special-design units recommended to solve a difficult handling problem. Our engineer, experienced in cost-saving shortcuts, showed how simple adaptation of more standard equipment could do the job even better.

This is the kind of service you can expect from WELD-BILT . . . a thorough analysis of your problems based on years of varied experience and wide knowledge, of handling problems . . . then a recommended solution that will do YOU the most good — in time and labor savings, in product protection, production speed-up — at the lowest cost. It may involve adapting standard equipment, custom-engineering new equipment — or merely realigning your present operations.

Call in the WELD-BILT Materials Handling Engineer for an economical solution to your problem today. You'll probably save money.

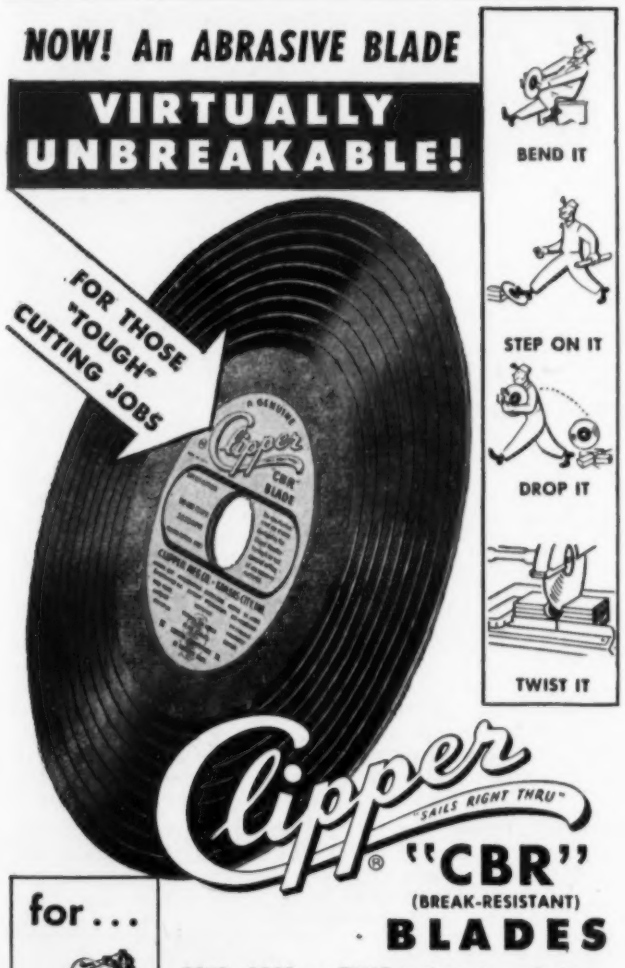
WEST BEND EQUIPMENT CORP.
311 Water St., West Bend, Wis.

MATERIALS HANDLING ENGINEERS

Portable Elevators • Pallet Trucks • Single Stroke Lift Trucks • Two-Wheel Trucks • Platform Trucks • Skid Platforms.

For more details circle NED-5909 on enclosed inquiry slip

NOW! An ABRASIVE BLADE VIRTUALLY UNBREAKABLE!



Clipper "SAILS RIGHT THRU" ® "CBR" (BREAK-RESISTANT) BLADES

for . . .

BEND—DROP—or TWIST in the cut . . . they're Virtually Unbreakable! Yes, Clipper "CBR" Blades are STRONG and SAFE and even more surprising the blade life is 50% to 100% longer than regular blades. It is not recommended for hard vitreous materials but rather the softer ranges of masonry. The most intricate cutting or grooving is now possible on Hand-Power Saws or Masonry Saws. Write today for prices and recommendations on this newest Dry Abrasive blade. Available in all diameters, arbor shapes and sizes.

DIAMOND and ABRASIVE BLADES for Any MASONRY or CONCRETE CUTTING

There's a Clipper Blade to cut your Brick, Glazed Tile, Fire Brick, Concrete block and Floors, Natural Stone, Glass and Porcelain. Available in sizes from 6" to 30". Choose Genuine Clipper for the FASTEST — CHEAPEST and LONGEST LASTING masonry cutting.

Clipper — KANSAS CITY 8, MISSOURI — ST. LOUIS, CLEVELAND, DETROIT, CINCINNATI, HOUSTON, AUSTIN, TEX., PHILADELPHIA, PITTSBURGH, SAN FRANCISCO, LOS ANGELES, CHICAGO, NEW YORK, ATLANTA, WASHINGTON, D.C., BOSTON, BIRMINGHAM, ST. PAUL, INDIANAPOLIS

SERVING THE WORLD AS THE WORLD'S LARGEST MANUFACTURER OF MASONRY SAWS

SOLD DIRECT FROM FACTORY BRANCHES

FREE ILLUSTRATED LITERATURE AND PRICES

CLIPPER MANUFACTURING CO.
Room 401, 2800 Warwick, Kansas City 8, Mo.
SEND FREE LITERATURE AND PRICES ON: 92
☐ "C B R" BLADES ☐ MASONRY SAWS
☐ ABRASIVE BLADES ☐ CONCRETE SAWS
☐ DIAMOND BLADES ☐ CONVERTIBLE SAWS
NAME _____
STREET _____
CITY _____ STATE _____

For more details circle NED-5910 on enclosed inquiry slip

New Literature & Catalogs

Spreader Stokers

Erie City Iron Works—Dumping-grate and Travagrate type spreader stokers for steam boilers are pictured and described and their specifications given in 16-page bulletin SB-42. Construction features, typical applications and feeder control are covered in detail.

For more details circle NED-5911 on enclosed inquiry slip

Which Aluminum Paint?

Skybryte Co.—"Choose and Use the Correct Aluminum Paint" is self-explanatory title of illustrated folder. Purpose and applications of five different aluminum paints are outlined. Types are available for heat-resisting, exterior, interior, acid and alkali resisting and general utility purposes.

For more details circle NED-5912 on enclosed inquiry slip

Motorized Pumps

Ingersoll-Rand Co., Resale Dept.—Horizontal and vertical models of Motorpumps, available in ¼ to 50-hp sizes and designed especially for air conditioning applications, are subject of 12-page illustrated bulletin 7177.

For more details circle NED-5913 on enclosed inquiry slip

Air & Gas Line Cleaner

Logan Engineering Co.—Details of the Aridifier which removes 92 per cent of all oil, moisture and dirt from compressed gas and air lines are presented in 8-page illustrated catalog 252. This compact device which fits right into pipe line utilizes centrigugal action as well as reverse and deflected action to assure clean air at tool, cylinder or equipment it serves.

For more details circle NED-5914 on enclosed inquiry slip

Heavy Duty Transmissions

Fuller Mfg. Co.—Selecting the proper transmission for truck and industrial applications is theme of 8-page illustrated "Condensed Specifications" guide. Data are given on number of speeds, type of mounting, gear ratios, approximate engine size, oil capacity, location of power take-off opening and relative speed.

For more details circle NED-5915 on enclosed inquiry slip

Electric Fork Trucks

Lewis-Shepard Products Inc.—20-page illustrated catalog "Electric Fork Trucks" describes design, performance and applications of SpaceMaster models. Accessories and attachments which extend use of trucks are shown.

For more details circle NED-5916 on enclosed inquiry slip

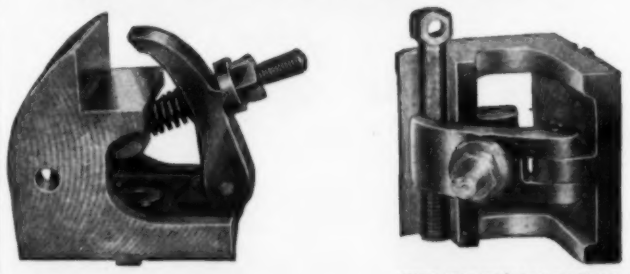
Packaging Machines

F. B. Redington Co.—More than 35 types of automatic cartoning and wrapping machines are described in 32-page illustrated catalog. Units are available for packaging anything from chewing gum and penpoints to peroxide.

For more details circle NED-5917 on enclosed inquiry slip

·HART·
MILLING FIXTURES
MASTERS OF 1000 SETUPS

ELIMINATE 1000 NEEDS FOR SPECIAL— AND EXPENSIVE JIGS AND FIXTURES



USED IN VERTICAL POSITION

HART MILLING FIXTURES make themselves popular and profitable in any shop—are used in either horizontal or vertical position. Will hold round, hexagonal, octagonal, or square stock, aligning the work with the machine. Grip holds the work on bottom as well as on back. Generally sold in pairs. Made in 4 sizes—to hold stock from ½ to 5 inches.

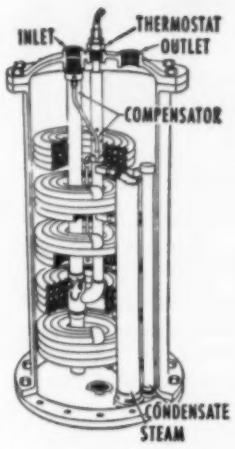
Write for new bulletin.

WALTER W. FIELD & SON INC.
39 HAYWARD STREET, CAMBRIDGE 42, MASS.

For more details circle NED-5918 on enclosed inquiry slip

A REVOLUTIONARY IDEA . . . for Heat Exchanger Control

AERCO CORPORATION
214 Lafayette Place • Englewood, N. J.



Where to put the thermostatic bulb on a storage type heater, or for controlling any heat exchanging operation, hot or cold, has always been a problem. The Aerco Heat Exchanger Control solves the problem by locating the bulb inside a tube which draws samples from the top and bottom of the tank in proportion to the rate of flow, and then mixes them inside the compensator tube. It governs and acts instantly when any water is taken off. Even when oversized the Aerco shuts off before there can be any over-ride. It controls to within two degrees on intermittent loads, and within half a degree on continuous loads up to 80% of the load.

For large installations, the Aerco may be used as a combination booster and temperature control in series with storage tanks, or shell and tube exchangers.

Technical Bulletin No. 22 describes the operating features with tables for size determination, water capacities and steam requirements. Standard Aerco units are made for capacities from 5 g.p.m. to 300 g.p.m. with temperature rises of from 5 to 150° F. 1E Advt.

For more details circle NED-5919 on enclosed inquiry slip

The Revolutionary NEW GRIP-STRUT *Safety* GRATING
gives MAXIMUM STRENGTH with MINIMUM WEIGHT

NOT welded. Vertical members joined by integral saddles to form a positive NON-SKID surface under *all* conditions. In one single unit, GRIP-STRUT Safety Grating combines great strength with light weight, its side channel members greatly reduce cost of construction and simplify installation. Easy to maintain and clean. Replaces old or obsolete types of grating. Grip-Strut has a lower cost factor than any other type of grating. Available in steel or aluminum.

GRIP-STRUT division
THE GLOBE COMPANY
4002 S. Princeton Ave. Chicago 9, Illinois

For more details circle NED-5920 on enclosed inquiry slip

Two fan sizes: 18 inch and 24 inch, capacities from 2000 cfm to 6400 cfm. Overall height 55½".

nyb

PEDESTAL FAN
(Industrial Type)

Available for Prompt Shipment From Stock

Place this versatile fan in the most effective spot to deliver a gentle breeze or a brisk wind for a variety of uses. Safety guards front and rear with totally enclosed motors to meet State Industrial Safety Code Requirements. Bolted construction simplifies shipment, assembly and storage.

Write for Bulletins

FANS • BLOWERS • UNIT HEATERS • MAKE-UP AIR UNITS • HEAVY DUTY HEAT SURFACE

nyb **THE NEW YORK BLOWER COMPANY**
SALES OFFICES • 32nd STREET and SHIELDS AVENUE • CHICAGO 16
FACTORY, LAPORTE, INDIANA

For more details circle NED-5921 on enclosed inquiry slip

PUSH BUTTON INSULATION RESISTANCE TESTING

with

VIBROTEST

- RANGES TO 50,000 MEGOHMS
- NO CRANKING
- NO LEVELING
- ALL-ELECTRIC
- RUGGED
- FULLY PORTABLE
- ACCURATE

VIBROTEST is built throughout to make insulation resistance testing FAST, EASY and ACCURATE for you. No laborious cranking...No mechanical parts to get out of order...Only two binding posts for ALL tests. Several Models have A.C. and D.C. volt ranges, as well as low resistance ohmmeter.

This is an instrument that makes insulation resistance testing a "push-button" affair! Ask for more information.

WRITE FOR BULLETIN 2-A

ASSOCIATED RESEARCH, Incorporated

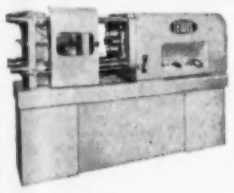
"Precision Instruments Since 1936"

3786 WEST BELMONT • CHICAGO 38, ILL.

For more details circle NED-5922 on enclosed inquiry slip

DON'T PLACE THAT ORDER!

. . . 'TIL YOU'VE CHECKED ON A LEWIS "4" INJECTION MOLDING MACHINE



The LEWIS Model 4 is the lowest cost machine available today for high-speed production of injected molded plastic shapes weighing 2 to 3 ounces. Simple to operate . . . compact . . . capable of handling many 8-ounce machine dies . . . this small but powerful **LEWIS** will produce large-projected-area parts.

Multiple shot injection, automatic operation and the ability to work with almost any molding material are only a few of its outstanding features. A special fast-opening crank-operated die-lock mechanism clears jammed nozzles *in 20 seconds or less.* In addition, the clean, simplified construction of the **LEWIS Model 4** assures maximum production with minimum maintenance . . . *and more profits for you!*

For **BIG** machine production at **SMALL** machine cost, *don't just "place an order* . . . **SPECIFY THE LEWIS "4"!**

Write today for illustrated Catalog No. 101 for additional details.

698-LW

LEWIS THE LEWIS WELDING & ENGINEERING CORPORATION

14 Interstate St. • Bedford, Ohio

For more details circle NED-5923 on enclosed inquiry slip

New Literature & Catalogs

Repairing Conveyor Belts

Magic Chemical Co.—How Magic-Vulc plastics rubber is used for repairing worn or torn spots on conveyor belts is explained in illustrated folder N83. Inexperienced workmen can renew belt surface without removing belt from conveyor. This material is also applicable for protecting all types of industrial equipment from corrosion and abrasion. It is a self-curing plastic rubber compound that spreads easily.

For more details circle NED-5924 on enclosed inquiry slip

How to Spark-Test Steels

Carpenter Steel Co.—"A Simplified Guide for Spark Testing Tool and Die Steels" is 20-page well-illustrated booklet that features individual spark diagrams of 13 standard tool and die steels. It aids in identification of steels to be sold for scrap and permits classifying steels that have lost their identity in stock. Included are instructions for dressing the grinding wheel and preparing the sample.

For more details circle NED-5925 on enclosed inquiry slip

Hole Sizing & Finishing

Industrial Tectonics Inc.—The ballizing process for high speed, precision hole sizing and finishing is described in 4-page illustrated bulletin 521. In process, an alloy steel or tungsten carbide ball of proper size is pressed through hole produced by drawing, die casting, extruding or machining operation. Hole can be held within 0.0002-in. of desired size, and burnished surface is practically free of roughness and irregularities.

For more details circle NED-5926 on enclosed inquiry slip

Postal Rate Chart

Pitney-Bowes, Inc.—Every office, mailroom or shipping department should have one of these practical comprehensive charts of new postal rates and information hanging on the wall. Covering all classes of mail and typographically designed for reading ease and accuracy, this 12 x 18-in. chart is printed in three colors on stiff card stock. It folds for desk use and filing convenience. On back of chart is parcel post zone map of the United States which can be scribed with aid of self-zoning mileage rule included with chart.

For more details circle NED-5927 on enclosed inquiry slip

Four-Rope Buckets

Blaw-Knox Co., Bucket Dept.—Users of overhead or bridge type cranes with four-rope bucket trolleys will find much of interest in 44-page illustrated bulletin 2392 on four-rope buckets. Described are bulk materials handling of such products as coal, ore, sand, chemicals and stone. Performance data and comparisons are given on cargo dispatch and discharging vessels, barges and railroad cars.

For more details circle NED-5928 on enclosed inquiry slip

CUT YOUR SWEEPING COSTS 75%

Free DEMONSTRATION PROVES IT

with

WILSHIRE POWER SWEEPERS

Costs in general may continue to go up, but here's one you can really cut...the cost of keeping your floors swept. WILSHIRE Power Sweepers not only cut your sweeping costs...they sweep cleaner, without dust. In the average plant, they pay for themselves in 10 to 12 weeks.

Write for the name of your nearest WILSHIRE Dealer who will be glad to give you a Free Demonstration right in your own plant.

WILSHIRE POWER SWEEPER CO.

516 WEST CHEVY CHASE DRIVE • GLENDALE 4, CALIFORNIA

IN CANADA—PLANT MAINTENANCE EQUIPMENT CO.—VANCOUVER, TORONTO

For more details circle NED-5929 on enclosed inquiry slip

FOR DEFENSE INDUSTRY MACHINIST WORKMAN FARMER

1ST IN METAL TOOL BOXES

CASES—CHESTS—CABINETS

Here are the world's finest metal boxes. They're better constructed—better looking. Known for their fine materials—workmanship—attractive design. These boxes outlook—outlast—outsell competition. Write for FREE book, including complete information.

WATERLOO METAL BOXES AND CHESTS

Waterloo

VALVE SPRING COMPRESSOR CO. WATERLOO, IOWA

For more details circle NED-5930 on enclosed inquiry slip

New! Low-Cost! Wide-Range!

VARIABLE Speed Sheaves

Easily Attached to Any Machine

1/15 TO 15 HP.

RATIOS UP TO 8:1

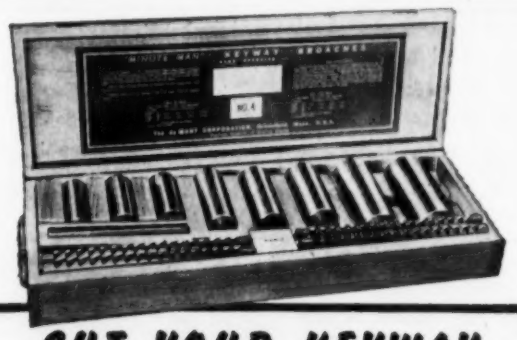
- Simple, sturdy Speed Selector Sheaves are applied to any machine in only a few minutes . . . giving you wide-range speed control at extremely low cost. You get wide speed variations with standard V-belts, since two variable pitch sheaves are used. Eliminates bulky sliding motor bases, movable jackshafts and wide, high-cost special V-belts.
- Standard V-belts
- Automatic belt alignment
- Fixed shaft centers
- LOW COST

Write FOR FREE BULLETIN

SPEED SELECTOR INC.

118-N NOBLE COURT • CLEVELAND 13, OHIO

For more details circle NED-5931 on enclosed inquiry slip



CUT YOUR KEYWAY

By Hand—In 1 Minute—For 1 Cent

Standard keyways from 1/16" to 1" in any bore from 1/4" to 3" — cut 'em quick and cheap with this du MONT *Minute Man* Keyway Broach Kit.

Get Size and Price Information: Mail this COUPON

The du MONT CORPORATION, Greenfield, Mass.

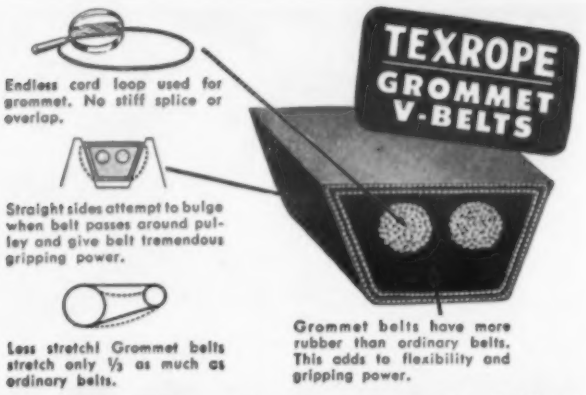
Please mail folder and price list D covering all *Minute Man Keyway Broaches and Kits* to:

Name.....

Company.....

Address.....

For more details circle NED-5932 on enclosed inquiry slip



Get 20-50% Longer Belt Life!

TEXROPE GROMMET belts cost same as ordinary belts yet last longer, grip better!

Patented grommet belts last 20 to 50% longer than ordinary belts, depending on the service. The more severe the service, the greater the increase over ordinary belts. The reason? There is no overlapping cord section as in ordinary belts.

In addition, *Texrope* grommet belts have more rubber in relation to belt size than ordinary belts. Without that stiff overlap, they're more flexible, grip pulleys better. Size for size, grommet belts give 1/3 more gripping power, pull heavier loads with greater safety factor.

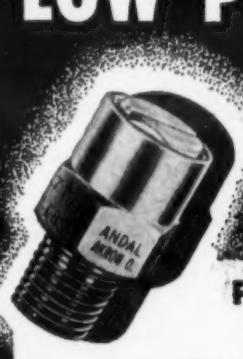
Call your nearby Allis-Chalmers distributor or district office and specify *Texrope* grommet V-belts. Or write Allis-Chalmers, Milwaukee 1, Wisconsin.

Texrope is an Allis-Chalmers trademark.

ALLIS-CHALMERS A-3714

For more details circle NED-5933 on enclosed inquiry slip

LOW PRESSURE RELIEF VALVE



Positive Control at 7-10 p.s.i.

Protect storage and shipping containers from excessive pressures with the new ANDAL type C-13 valve. It provides accurate control of gases and vapors at pre-set range of 7 to 10 p.s.i. Valve features compact design, sturdy construction, non-corrosive parts, standard pipe thread fittings. Meets government salt spray tests. Four sizes available with various types of mountings and constructions.

659-AA *Write today for catalog*

ANDREWS-ALDERFER COMPANY

1102 HOME AVE. • AKRON 10, OHIO

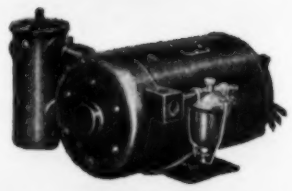
For more details circle NED-5934 on enclosed inquiry slip

HERE YOU HAVE **VACUUM** IN THE MOST **COMPACT** UNIT!

Requires scarcely more space than its own motor!

MOTOAIR* PUMP

Motor and pump in one integral unit makes it ideal for compactly incorporating in existing machine designs.



NO BELTS
NO EXTENDED DRIVE

Operates equally well whether ceiling, wall or normally mounted. Visible lubrication; built-in exhaust air-filter; no "discharge oil". Motoair is a rotary type, with floating blades compensating for their own wear.

819 *Ask for Catalog . . .*

NEW JERSEY MACHINE CORPORATION
1530 Willow Ave. • Hoboken, N. J.
Factory offices in Chicago, Cincinnati, Los Angeles

For more details circle NED-5935 on enclosed inquiry slip

New Literature & Catalogs

Speed Reducers

De Laval Steam Turbine Co., Standard Products Div.—Double reduction speed reducers is subject of 48-page illustrated catalog G-WWH. Both double worm and helical-worm types are covered, and complete engineering and application data are included. Bulletin is divided into sections on types, selection, horsepower and torque ratings, overhung loads, dimensions and arrangements. Reductions up to 6400:1 are available.

For more details circle NED-5936 on enclosed inquiry slip

Hoists-Derricks-Cranes-Winches-Pullers

American Hoist & Derrick Co.—32-page illustrated Catalog GC-2 describes complete line of materials handling equipment which includes all types of cranes, steel derricks, car pullers, material elevators, wire rope clips and fittings, hoists, pulley blocks, winches, sheaves and marine deck equipment.

For more details circle NED-5937 on enclosed inquiry slip

Carbide Cutting Tools

Wendt-Sonis Co.—72-page illustrated catalog No. 52 contains specifications and prices of more than 1000 carbide cutting tools. Data are given on boring tools, burs, centers, counterbores, cut-off tools, drills, end mills, bits, reamers, roller turning tools, solid carbide tools, spot facers and hundreds of other tools. Included is carbide manufacturers' grade recommendation chart.

For more details circle NED-5938 on enclosed inquiry slip

Special Production Machinery

Buhr Machine Tool Co.—48-page illustrated catalog "Special Machinery" includes specifications and details of production drilling, tapping, reaming and chamfering machine tools. In addition to describing machine, bulletin gives details of part it processes, operation performed at each station and other details.

For more details circle NED-5939 on enclosed inquiry slip

Finned Heating Convectors

National Radiator Co.—Useful information concerning design, ratings, installation and performance of National Fintube convectors is presented in 4-page illustrated catalog No. 587. Adaptable to steam or hot water heating systems, these units are available in sizes and types for every need. Minimum of floor space is needed.

For more details circle NED-5940 on enclosed inquiry slip

Abrasive-Belt Polishing

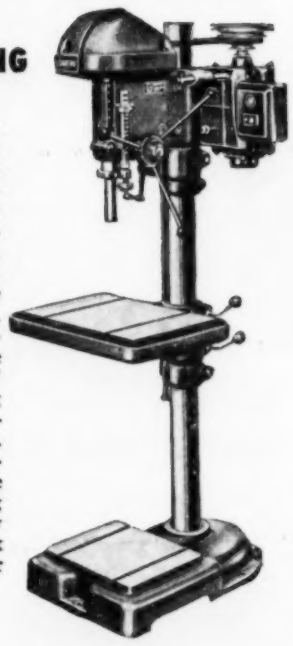
Armour & Co., Coated Abrasives Div.—The how, why and where of abrasive-belt finishing of metal products is related in 8-page illustrated guide booklet entitled "Backstand-Belt Polishing." How to select proper belt for desired finish, the care of abrasive belts and belt finishing techniques are cited.

For more details circle NED-5941 on enclosed inquiry slip

Atlas CLAUSING PRECISION MACHINE TOOLS DIVISION ATLAS PRESS COMPANY KALAMAZOO, MICHIGAN U.S.A.

18" HEAVY DUTY DRILL PRESS

. . . FOR BETTER HEAVY DUTY DRILLING



Get these important new drilling advantages with a Clausing 18" Drill Press. The 6½" spindle travel gives bigger job capacity, permits better use of production chucks. Drilling capacity: ¾" in steel, 1" in cast iron. Spindle nose is No. 3 MT. There's 6" to 13" *more* capacity from spindle to table. Spindle is bigger, stronger—handles larger tools. Exclusive vernier control provides .001" depth accuracy. Positioning mechanism saves set-up time—moves *both* head and table. Massive construction, precision-machining throughout, and the smoothness of 5 ball bearing races insure exacting accuracy on every operation. Contact your Clausing distributor, or write for catalog.

CLAUSING DIVISION

ATLAS PRESS CO., 623 N. Pitcher St., Kalamazoo, Mich.

For more details circle NED-5942 on enclosed inquiry slip

Protect machined parts, name plates, holes, threads, designs, etc., during finishing operations. Eliminate slow, costly hand cutting of masks and stencils.

Self-adhesive Brady QUIK-MASKS are pre-cut to sizes and shapes you need. They come mounted on handy dispenser cards or individual liners for speedy application. You just *peel, press, protect.* Hi-Heat resistant to 300° F. Quickly removed after baking without residue. Squares, circles and rectangles in all standard production sizes available from stock. Specials made to your exact requirements. Send for FREE samples and idea-packed literature.

WIRE MARKERS · PIPE MARKERS · SAFETY SIGNS · PRINTED "SCOTCH" TAPE · MASKS & STENCILS

MANUFACTURERS OF SELF-STICKING PRODUCTS

W. H. BRADY COMPANY

1663 E. SPRING STREET • CHIPPEWA FALLS, WIS.

For more details circle NED-5943 on enclosed inquiry slip

BILLMYRE BLOWERS & EXHAUSTERS

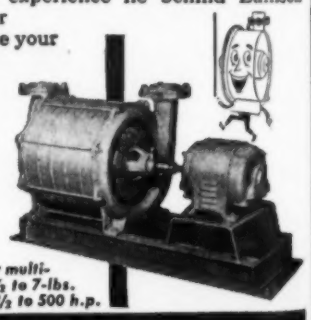
HOW MUCH AIR OR GAS?

Get the right amount of clean, dry air or gas with the right BILLMYRE Blower and Exhauster.

- **TAILOR-MADE PRESSURE**...from ½ to 7-lbs., to suit your air or gas temperature and density ranges.
- **CONSTANT PRESSURE**...motor drive and self-governing design eliminate separate controls, guarantee even pressure.
- **NO CONTAMINATION**...no internal lubrication necessary, air is *always* kept clean and dry.
- **LOW MAINTENANCE COST**...motor-driven shaft-impeller assembly is the only moving part, eliminates constant checking.
- **VERSATILITY**...performance-proved for agitating, aerating, combustion, cooling, ventilating, gas and acid manufacturing, vacuum cleaning and many other applications.

Fifty years of air-moving experience lie behind Lamson BILLMYRE products. Let our engineering staff help you solve your air or gas problems.

Write for information—Bulletin B-5. BILLMYRE Blower Division, Lamson Corporation, 550 Lamson St., Syracuse 1, N. Y. Offices in principal cities. Consult your Redbook.



8419 LAMSON *Single or multi-stage . . . ½ to 7-lbs. pressure . . . ½ to 500 h.p.*

For more details circle NED-5944 on enclosed inquiry slip

Every Man, Woman and Child in the U.S.A. Can Go Riding at the Same Time

IN the U. S. A., competition is basically responsible for better cars at lower comparative cost. We enjoy the use of 3 times as many cars, and annually produce 4 times as many cars, as the rest of the world put together. Approximately 43 million autos, and 9 million trucks and buses, are in use in the U.S.A. today . . . more than enough to take everyone riding at once.

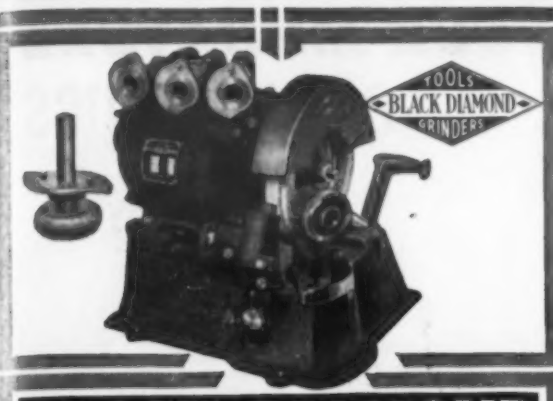
Our competitive system stimulates the sale of the new and the resale of the old. In most foreign countries people *must* make things last. In the U. S. A. vigorous competition prompts continuous progress, so that new-car buyers get maximum value and lowest-income groups benefit by lowered prices of used, yet useful, products. Result: a high standard of living for all. In most of the rest of the world only the rich enjoy luxuries. In the U. S. A., the irresistible drive of competition places most of the miraculous products within reach of all.

Free competition—like freedom of speech, press and religion—is a dynamic part of Uncle Sam's character. Let's keep it free!

This report on PROGRESS-FOR-PEOPLE is published by this magazine in cooperation with National Business Publications, Inc., as a public service.

THE COMPETITIVE SYSTEM DELIVERS THE MOST TO THE GREATEST NUMBER OF PEOPLE

For more details circle NED-5945 on enclosed inquiry slip



BLACK DIAMOND
PRECISION DRILL GRINDER

FOR SHARPENING—ALL SMALL DRILLS
CUTS DRILLING COSTS, DRILL BREAKAGE AND WORK REJECTS 50% AND MORE; CONSERVES SKILLED LABOR

Black Diamond Grinders cut 50% and more on drill sharpening and drilling costs. They sharpen small drills so efficiently and accurately that drill breakage and work spoilage are tremendously reduced.

Anyone can operate a Black Diamond, can keep all small drills sharp—and true centered with smooth lips accurately ground to the same length, correct angle and clearance for fast, precision drilling.

The built-in Diamond Point Dresser, is instantly available to keep the grinding wheel sharp cutting and the Web Thinning Attachment cares for all types of Notched Points.

If you use small drills, singly or in gangs, this moderately priced grinder will keep any quantity sharp, always ready for use. You should own a Black Diamond. Write for New Bulletin.

BLACK DIAMOND SAW & MACHINE WORKS, INC.
NATICK, MASSACHUSETTS

▲ For more details circle NED-5946 on enclosed inquiry slip ▲

AN ANSWER TO YOUR DRIVE PROBLEM

FOOTE BROS. WORM HELICAL DRIVES

Rugged strength, the ability to stand up under punishing loads characterize this drive.

Input shafts are horizontal, output shafts vertical, up or down — making these units ideal for use wherever materials must be agitated or mixed.

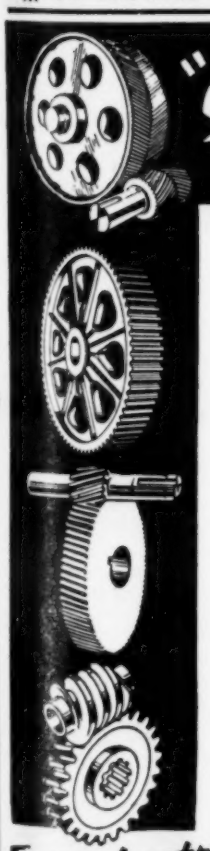
Available in ratios from approximately 25 up to 285 to 1 — capacities up to 128 h. p.

Write for Bulletin WHA.

FOOTE BROS. GEAR AND MACHINE CORPORATION
Dept. NE, 4545 S. Western Blvd. • Chicago 9, Illinois

FOOTE BROS.
Better Power Transmission Through Better Bears

▲ For more details circle NED-5947 on enclosed inquiry slip ▲



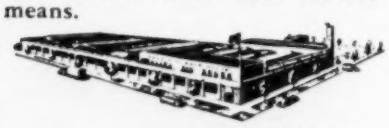
"Industrial Cut Gears"

Scheduled Deliveries to Coincide with Your Assembly Requirements

Place your gear, sprocket and splining assignments where you are assured of highest quality and reliable deliveries.

Our vast plant has ample turning, cutting, milling, drilling, broaching and inspecting equipment to handle your volume equitably—and, we're not so big as to not render "personal service." You'll like our methods—try us!

Your next order for Gearing of any kind is our opportunity to demonstrate what real service means.



See this plant in Pictorial form. Write for Brochure 152-A.

Industrial Gear Mfg. Co.
4541 W. VAN BUREN ST.
CHICAGO 24, ILL.

▲ For more details circle NED-5948 on enclosed inquiry slip ▲

New Literature & Catalogs

Welding Die Castings

Eutectic Welding Alloys Corp.—How Kirksite dies and other zinc die castings can be welded without melting the parent metal is detailed in illustrated leaflet TIS 969.

▲ For more details circle NED-5949 on enclosed inquiry slip ▲

Combustion & Heating

"The North American Combustion Handbook" is a basic reference on industrial heating with liquid and gaseous fuels. This 322-page manual has 178 charts, tables and illustrations which deal with industrial fuel burning. Included is glossary of terms used in the combustion industry. Price is $2.00. Published by North American Mfg. Co., 4453 E. 71st St., Cleveland 5, O.

▲ For more details circle NED-5950 on enclosed inquiry slip ▲

Wire Formers & Bench Presses

Baird Machine Co.—Two bulletins are available to design, engineering and production men in metal working industries. First, a 12-page illustrated bulletin on four-slide wire forming describes automatic machines which handle both wire and ribbon stock. Second, on automatic bench power presses, details machines for forming strip stock into wide variety of shapes.

▲ For more details circle NED-5951 on enclosed inquiry slip ▲

Dipping Baskets

Hanson-Van Winkle-Munning Co.—Round, tray and rectangular dipping baskets for immersing objects in electrocleaning and electroplating solutions are shown in illustrated bulletin D-108. Baskets are made of four wire sizes and with six different meshes.

▲ For more details circle NED-5952 on enclosed inquiry slip ▲

How to Spot a Water Cooler

General Electric Co., Air Conditioning Dept.—Payroll dollars can be saved by cutting wasted man-hours if water coolers are properly placed in industrial plants and offices. "The G-E Work Center Plan for Water Cooler Placement" contains sample floor plans for proper placement, outlines a five-step method of analyzing drinking water requirements of any work center, and has table to show payroll savings that are possible.

▲ For more details circle NED-5953 on enclosed inquiry slip ▲

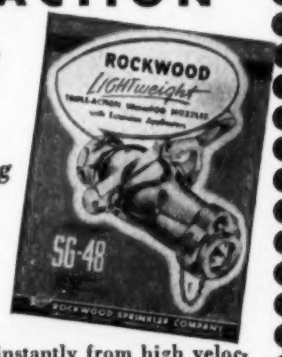
Roof Maintenance

Tremco Mfg. Co.—"Solving Roof Problems" is 32-page illustrated brochure that explores such subjects as types of roofs, how they are built, what causes deterioration, how roof troubles can be diagnosed and solutions to roofing maintenance problems. Field experience is cited on various phases of roofing and its maintenance.

▲ For more details circle NED-5954 on enclosed inquiry slip ▲

Avoid large fire losses with

TRIPLE-ACTION WaterFOG NOZZLE

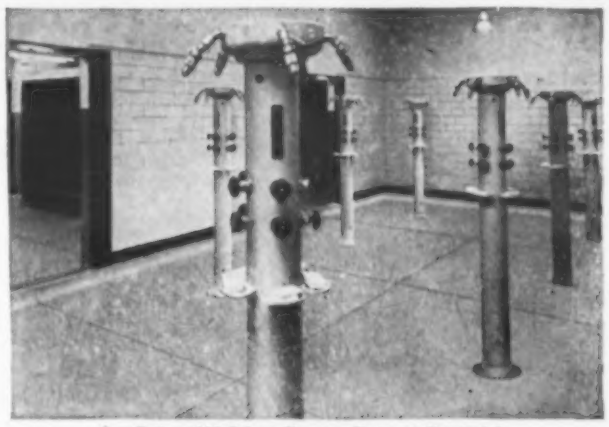


Get the amazing facts today! Send for this free booklet—no obligation

Triple action! Change instantly from high velocity WaterFOG to straight stream to low velocity WaterFOG. Even untrained, unskilled men can easily use Rockwood's new lightweight SG-48 nozzle. Extinguishes and controls fires in both ordinary combustible and flammable liquids *faster—and with less water, less damage.* Operates at 50 psi at the nozzle. Write for Bulletin C-501R. Distributors in all principal cities.

ROCKWOOD
SPRINKLER COMPANY
44 HARLOW ST., WORCESTER 5, MASS.

▲ For more details circle NED-5955 on enclosed inquiry slip ▲



Installation of 10 Column Showers, Cincinnati Chemical Co.

THEY SELECTED BRADLEY COLUMN SHOWERS

Without the usual partitions of the 3-stall or 5-stall Bradley Showers, the Column Showers are otherwise complete with drain fittings, sprayheads, soap trays, mixing chamber for temperature control with hot and cold water control valves. Ready to install.

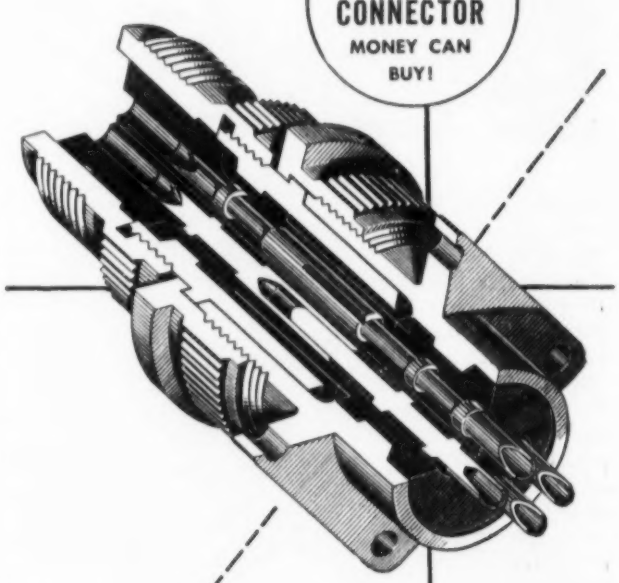
Floor space is saved and by placing Showers away from walls, wall water-proofing is not required and space may be used for lockers and benches.

Here's the answer to your Shower requirements at low cost. Write for Catalog 4701-CS. BRADLEY WASHFOUNTAIN CO., 2253 W. Michigan Street, Milwaukee 1, Wisconsin.

BRADLEY showers
Distributed through Plumbing Wholesalers

▲ For more details circle NED-5956 on enclosed inquiry slip ▲

The Finest ELECTRICAL CONNECTOR MONEY CAN BUY!



SCINFLEX ASSURES YOU PEAK PROTECTION AGAINST CIRCUIT FAILURE

When operating conditions demand an electrical connector that will stand up under the most rugged requirements, always choose Bendix Scinflex Electrical Connectors. The insert material, an exclusive Bendix development, is one of our contributions to the electrical connector industry. The dielectric strength remains well above requirements within the temperature range of −67°F to +275°F. It makes possible a design increasing resistance to flashover and creepage. It withstands maximum conditions of current and voltage without breakdown. But that is only part of the story. It's also the reason why they are vibration-proof and moisture-proof. So, naturally, it pays to specify Bendix Scinflex Connectors and get this extra protection. Our sales department will be glad to furnish complete information on request.

• Moisture-Proof • Radio Quiet • Single Piece Inserts • Vibration-Proof • Light Weight • High Insulation Resistance • High Resistance to Fuels and Oils • Fungus Resistant • Easy Assembly and Disassembly • Fewer Parts than any other Connector • No additional solder required.

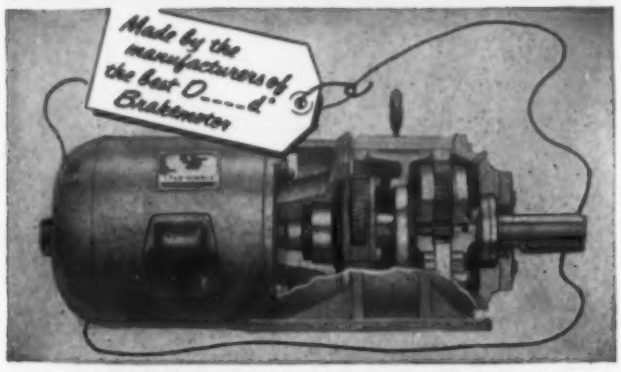
BENDIX SCINFLEX
ELECTRICAL CONNECTORS

Bendix
SCINTILLA MAGNETO DIVISION of
SIDNEY, NEW YORK
Bendix AVIATION CORPORATION

Export Sales: Bendix International Division, 72 Fifth Avenue, New York 11, N. Y.
FACTORY BRANCH OFFICES: 118 E. Providencia Ave., Burbank, Calif. • Stephenson Bldg., 6560 Cass Ave., Detroit 2, Michigan • Brouwer Bldg., 176 W. Wisconsin Avenue, Milwaukee, Wisconsin • 582 Market Street, San Francisco 4, California

▲ For more details circle NED-5957 on enclosed inquiry slip ▲

PLANETARY DRIVE REDUCES WEAR



. . . LENGTHENS LIFE of Star-Kimble Gearmotors

The planetary gear speed-reducing system in Star-Kimble Gearmotors distributes bearing load uniformly, reduces risk of wear. The helical gears are precision-shaved for quiet operation and long life.

Other features: Splash-type lubrication of bearings and gears. Mounting in any position. Integral design and manufacture—each part designed to work with all other parts—all major components made by Star-Kimble.

*Demanded by industry for tough start-and-stop jobs

For details, write for Bulletin B-601.

STAR-KIMBLE
MOTOR DIVISION OF
MIEHLE PRINTING PRESS & MFG. CO.
214 Bloomfield Avenue Bloomfield, New Jersey

▲ For more details circle NED-5958 on enclosed inquiry slip ▲

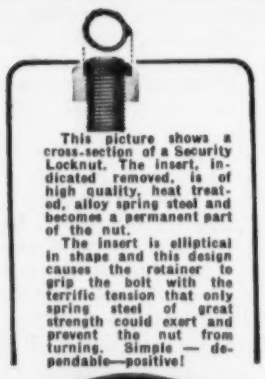
MULTIPLE-UNIT BLOWING means **FLEXIBILITY** and **ECONOMY**
• *in furnace draft*
• *in line boosting*

with "Buffalo" "E" BLOWERS

Several of these heavy-duty cast iron blowers-exhausters will give you greater flexibility and economy of operation than a single large blower, on jobs requiring constant air pressures over a wide range of capacities. 12 sizes, up to 5500 cfm and pressures up to 2 lbs. WRITE FOR BULLETIN 3014-D

BUFFALO FORGE COMPANY
215 MORTIMER ST. BUFFALO, NEW YORK
PUBLISHERS OF "FAN ENGINEERING" HANDBOOK
Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
Sales Representatives in all Principal Cities

▲ For more details circle NED-5959 on enclosed inquiry slip ▲



This picture shows a cross-section of a Security Locknut. The insert, indicated removed, is of high quality, heat treated, alloy spring steel and becomes a permanent part of the nut.
The insert is elliptical in shape and this design causes the retainer to grip the bolt with the terrific tension that only spring steel of great strength could exert and prevent the nut from turning. Simple — dependable—positive!

There is NO OTHER FASTENER LIKE THIS!

Perhaps you believe a cotter pin is the only way to hold anything positively on a shaft. A Security Locknut stays put where you wrench it even in the face of vibration that destroys the bolt.

Security Locknuts permit accurate adjustments with a torque wrench. They are complete as a unit. Nothing to line up. Installation involves only one operation. No holes to weaken the shaft.

Adjusted and readjusted them any number of times. *Removed and re-used them over and over again without impairing their locking power and without damage to the bolt.* If you have a vibration or fastener problem, Security Locknuts may save you money.

⅜ in. to 3 in. bolt sizes. Ask to see the Security Locknut Tests.

SECURITY
LOCKNUT CORPORATION
NORTH AVE. & 15th AVE.
MELROSE PARK, ILL.

SECURITY LOCKNUT CORP.
North Ave. and 15th Ave.
Melrose Park, Ill.
Please send me without obligation:
☐ A Thread Tolerance Chart.
☐ We have a fastener problem and would like to know more about Security Locknuts.
Company Name .....
Address .....
Town .....Zone...State.....
Signed .....

Security
The Nut You Can't Shake Loose

▲ For more details circle NED-5960 on enclosed inquiry slip ▲

New Literature & Catalogs

Protective Wood Treatment

Dow Chemical Co., Dowicide Sales—Workable specifications for wood treatment in the general construction field are detailed in literature on use of pentachlorophenol which protects wood against attack by rot and insects. In addition to listing various solutions, sources of supply for treated wood are listed.

▲ For more details circle NED-5961 on enclosed inquiry slip ▲

Three-Dimensional Microscopes

Bausch & Lomb Optical Co.—Photos and sketches of various models of the series 14 Stereomicroscopes found in 20-page catalog D-15 provides a comprehensive 'look' at the instrument whose three-dimensional feature provides magnified images which are both stereoscopic and unreversed. Other features include dustproof prism housing seal and nosepieces, interchangeable objectives, side focusing rack and sliding nosepieces.

▲ For more details circle NED-5962 on enclosed inquiry slip ▲

V-Drive Selection

Fort Worth Steel & Machinery Co.—V-drive selections can be made quickly with the practical aid offered by Engineering Guide No. 50-A. Formulas for standard quarter-turn and V-flat drives are augmented by tables of drives in belt sections compiled for quick selection according to ratio and speed. Data on other types of V-belt drives are included.

▲ For more details circle NED-5963 on enclosed inquiry slip ▲

Selenium Rectifier Stacks

General Electric Co., Lighting & Rectifier Dept.—28-page booklet GET-2350 covers basic characteristics and applications of selenium rectifier stacks. Booklet is complete with charts, graphs and tables illustrating principles of rectification, and the characteristics, manufacture, circuit design and application of selenium rectifiers.

▲ For more details circle NED-5964 on enclosed inquiry slip ▲

DC Power Supply

Superior Electric Co.—The Varicell power supply, a source of variable stabilized-regulated direct current voltages operating from alternating current power lines, is subject of 4-page illustrated bulletin V1051. Photos, circuit diagrams, outline dimensions, ratings and descriptive data are provided.

▲ For more details circle NED-5965 on enclosed inquiry slip ▲

Wrought Washers

Joliet Wrought Washer Co.—Complete listing of line of wrought washers along with dimensions, prices and available finishes is contained in 8-page catalog. Section with decimal equivalent tables, as well as tables showing diameters, weights and thicknesses, is provided. Special washers are illustrated with their carton and keg sizes.

▲ For more details circle NED-5966 on enclosed inquiry slip ▲

WHEN THE AXLE COUNTS...
SPECIFY CARAVAN

United has engineered axle types and sizes to meet a wide range of axle requirements for air compressors, generators, electric welders, concrete mixers, military units, etc.

Sturdy, dependable United CARAVAN units utilize solid steel axle beams and are available as single-axle (2-wheel) assemblies as well as four-wheel running gear equipped with automotive-type steering. Straight or drop-axles can be supplied with load capacities from 1,000 to over 12,000 pounds.

Optional features include CARAVAN automatic surge-brake control, spring cushion hitch and the CARAVAN landing gear assembly for use with two-wheel units.

Write for illustrated catalog No. 101.

431-UM

THE UNITED MFG. CO.
610 W. Interstate St. • Bedford, Ohio

▲ For more details circle NED-5967 on enclosed inquiry slip ▲

SUB-MINIATURE CANNON PLUGS

tiny but rugged

Series D—the new sub-miniature Cannon Plugs have 15 contacts for #20 or #22 AWG stranded wire. Others in the series have 25, 37 and 50 contacts. These new plugs meet a long felt need of the Electronics Industry for a sturdy, versatile, and extremely compact connector for use on miniaturized equipment of all kinds. Junction shells make them useable as (1) rack and panel (2) box (3) wall, or (4) cord connectors.

Contacts are machined from copper base alloy, gold plated, rated 5a. High dielectric insulators. Minimum flashover 1000 v. rms. Write for bulletin D-1.

CANNON ELECTRIC

SINCE 1915—Factories in Los Angeles, Toronto, New Haven, Benton Harbor. Representatives in principal cities. Address inquiries to Cannon Electric Company, Dept. F-113, P.O. Box 75, Lincoln Heights Station, Los Angeles 31, California.

▲ For more details circle NED-5968 on enclosed inquiry slip ▲

LINEMASTER puts feet to work when hands are busy! Compact switch operates with light pressure from foot—or knee, if mounted on bench or side of wall. Increases production by allowing full use of both hands. Prevents accidents to fingers. Sturdy cast iron housing, black crackle enamel finish. Simonds LINEMASTER offers low first cost, and years of trouble-free operation.

WRITE FOR BULLETIN AND PRICES | Let us quote on your special switch requirements

SIMONDS MACHINE CO., INC. 33 VIKING TERRACE SOUTHBRIDGE, MASS.

▲ For more details circle NED-5969 on enclosed inquiry slip ▲

NEW *TRIPL-PALM* GLOVES

ROUGH AND TOUGH FOR EXTRA LONG SERVICE LIFE

"Tripl-Palm Construction" of this extra tough work glove provides an extremely heavy synthetic rubber coating on the palm where the greatest resistance to wear and abrasion is needed most—yet, they are soft and pliable for hand comfort.

You have not experienced long service life for coated work gloves until you try them. Especially designed for handling cement blocks, molds, brick and clay products, foundry products and wherever resistance to heavy abrasion is necessary—they outwear by many times, the usual coated glove.

All styles with "Wing Thumb Construction" available from your jobber or write today.

SEE YOUR DISTRIBUTOR OR WRITE

THE SURETY RUBBER CO.
100 Hall Avenue, Carrollton, Ohio, Dept. N

▲ For more details circle NED-5970 on enclosed inquiry slip ▲

FOLD • SEAL • MAIL

Have You Filled-In Your Name and Address?

FOLD TO THIS LINE

To obtain additional information on any items in this issue of NEW EQUIPMENT DIGEST, circle numbers below which correspond with those of desired items. Your request will be forwarded promptly to manufacturer. Please give your name, title, company and address. This postage-free mailer should be folded as indicated for mailing.

5000	5050	5100	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850	5900	5950	6000	6050	6100	6150
5001	5051	5101	5151	5201	5251	5301	5351	5401	5451	5501	5551	5601	5651	5701	5751	5801	5851	5901	5951	6001	6051	6101	6151
5002	5052	5102	5152	5202	5252	5302	5352	5402	5452	5502	5552	5602	5652	5702	5752	5802	5852	5902	5952	6002	6052	6102	6152
5003	5053	5103	5153	5203	5253	5303	5353	5403	5453	5503	5553	5603	5653	5703	5753	5803	5853	5903	5953	6003	6053	6103	6153
5004	5054	5104	5154	5204	5254	5304	5354	5404	5454	5504	5554	5604	5654	5704	5754	5804	5854	5904	5954	6004	6054	6104	6154
5005	5055	5105	5155	5205	5255	5305	5355	5405	5455	5505	5555	5605	5655	5705	5755	5805	5855	5905	5955	6005	6055	6105	6155
5006	5056	5106	5156	5206	5256	5306	5356	5406	5456	5506	5556	5606	5656	5706	5756	5806	5856	5906	5956	6006	6056	6106	6156
5007	5057	5107	5157	5207	5257	5307	5357	5407	5457	5507	5557	5607	5657	5707	5757	5807	5857	5907	5957	6007	6057	6107	6157
5008	5058	5108	5158	5208	5258	5308	5358	5408	5458	5508	5558	5608	5658	5708	5758	5808	5858	5908	5958	6008	6058	6108	6158
5009	5059	5109	5159	5209	5259	5309	5359	5409	5459	5509	5559	5609	5659	5709	5759	5809	5859	5909	5959	6009	6059	6109	6159
5010	5060	5110	5160	5210	5260	5310	5360	5410	5460	5510	5560	5610	5660	5710	5760	5810	5860	5910	5960	6010	6060	6110	6160
5011	5061	5111	5161	5211	5261	5311	5361	5411	5461	5511	5561	5611	5661	5711	5761	5811	5861	5911	5961	6011	6061	6111	6161
5012	5062	5112	5162	5212	5262	5312	5362	5412	5462	5512	5562	5612	5662	5712	5762	5812	5862	5912	5962	6012	6062	6112	6162
5013	5063	5113	5163	5213	5263	5313	5363	5413	5463	5513	5563	5613	5663	5713	5763	5813	5863	5913	5963	6013	6063	6113	6163
5014	5064	5114	5164	5214	5264	5314	5364	5414	5464	5514	5564	5614	5664	5714	5764	5814	5864	5914	5964	6014	6064	6114	6164
5015	5065	5115	5165	5215	5265	5315	5365	5415	5465	5515	5565	5615	5665	5715	5765	5815	5865	5915	5965	6015	6065	6115	6165
5016	5066	5116	5166	5216	5266	5316	5366	5416	5466	5516	5566	5616	5666	5716	5766	5816	5866	5916	5966	6016	6066	6116	6166
5017	5067	5117	5167	5217	5267	5317	5367	5417	5467	5517	5567	5617	5667	5717	5767	5817	5867	5917	5967	6017	6067	6117	6167
5018	5068	5118	5168	5218	5268	5318	5368	5418	5468	5518	5568	5618	5668	5718	5768	5818	5868	5918	5968	6018	6068	6118	6168
5019	5069	5119	5169	5219	5269	5319	5369	5419	5469	5519	5569	5619	5669	5719	5769	5819	5869	5919	5969	6019	6069	6119	6169

FOLD TO THIS LINE

5020	5070	5120	5170	5220	5270	5320	5370	5420	5470	5520	5570	5620	5670	5720	5770	5820	5870	5920	5970	6020	6070	6120	6170
5021	5071	5121	5171	5221	5271	5321	5371	5421	5471	5521	5571	5621	5671	5721	5771	5821	5871	5921	5971	6021	6071	6121	6171
5022	5072	5122	5172	5222	5272	5322	5372	5422	5472	5522	5572	5622	5672	5722	5772	5822	5872	5922	5972	6022	6072	6122	6172
5023	5073	5123	5173	5223	5273	5323	5373	5423	5473	5523	5573	5623	5673	5723	5773	5823	5873	5923	5973	6023	6073	6123	6173
5024	5074	5124	5174	5224	5274	5324	5374	5424	5474	5524	5574	5624	5674	5724	5774	5824	5874	5924	5974	6024	6074	6124	6174
5025	5075	5125	5175	5225	5275	5325	5375	5425	5475	5525	5575	5625	5675	5725	5775	5825	5875	5925	5975	6025	6075	6125	6175
5026	5076	5126	5176	5226	5276	5326	5376	5426	5476	5526	5576	5626	5676	5726	5776	5826	5876	5926	5976	6026	6076	6126	6176
5027	5077	5127	5177	5227	5277	5327	5377	5427	5477	5527	5577	5627	5677	5727	5777	5827	5877	5927	5977	6027	6077	6127	6177
5028	5078	5128	5178	5228	5278	5328	5378	5428	5478	5528	5578	5628	5678	5728	5778	5828	5878	5928	5978	6028	6078	6128	6178
5029	5079	5129	5179	5229	5279	5329	5379	5429	5479	5529	5579	5629	5679	5729	5779	5829	5879	5929	5979	6029	6079	6129	6179
5030	5080	5130	5180	5230	5280	5330	5380	5430	5480	5530	5580	5630	5680	5730	5780	5830	5880	5930	5980	6030	6080	6130	6180
5031	5081	5131	5181	5231	5281	5331	5381	5431	5481	5531	5581	5631	5681	5731	5781	5831	5881	5931	5981	6031	6081	6131	6181
5032	5082	5132	5182	5232	5282	5332	5382	5432	5482	5532	5582	5632	5682	5732	5782	5832	5882	5932	5982	6032	6082	6132	6182
5033	5083	5133	5183	5233	5283	5333	5383	5433	5483	5533	5583	5633	5683	5733	5783	5833	5883	5933	5983	6033	6083	6133	6183
5034	5084	5134	5184	5234	5284	5334	5384	5434	5484	5534	5584	5634	5684	5734	5784	5834	5884	5934	5984	6034	6084	6134	6184
5035	5085	5135	5185	5235	5285	5335	5385	5435	5485	5535	5585	5635	5685	5735	5785	5835	5885	5935	5985	6035	6085	6135	6185
5036	5086	5136	5186	5236	5286	5336	5386	5436	5486	5536	5586	5636	5686	5736	5786	5836	5886	5936	5986	6036	6086	6136	6186
5037	5087	5137	5187	5237	5287	5337	5387	5437	5487	5537	5587	5637	5687	5737	5787	5837	5887	5937	5987	6037	6087	6137	6187
5038	5088	5138	5188	5238	5288	5338	5388	5438	5488	5538	5588	5638	5688	5738	5788	5838	5888	5938	5988	6038	6088	6138	6188
5039	5089	5139	5189	5239	5289	5339	5389	5439	5489	5539	5589	5639	5689	5739	5789	5839	5889	5939	5989	6039	6089	6139	6189
5040	5090	5140	5190	5240	5290	5340	5390	5440	5490	5540	5590	5640	5690	5740	5790	5840	5890	5940	5990	6040	6090	6140	6190
5041	5091	5141	5191	5241	5291	5341	5391	5441	5491	5541	5591	5641	5691	5741	5791	5841	5891	5941	5991	6041	6091	6141	6191
5042	5092	5142	5192	5242	5292	5342	5392	5442	5492	5442	5592	5642	5692	5742	5792	5842	5892	5942	5992	6042	6092	6142	6192
5043	5093	5143	5193	5243	5293	5343	5393	5443	5493	5543	5593	5643	5693	5743	5793	5843	5893	5943	5993	6043	6093	6143	6193
5014	5094	5144	5194	5244	5294	5344	5394	5444	5494	5544	5594	5644	5694	5744	5794	5844	5894	5944	5994	6044	6094	6144	6194

FOLD ON THIS LINE

5045	5095	5145	5195	5245	5295	5345	5395	5445	5495	5545	5595	5645	5695	5745	5795	5845	5895	5945	5995	6045	6095	6145	6195
5046	5096	5146	5196	5246	5296	5346	5396	5446	5496	5546	5596	5646	5696	5746	5796	5846	5896	5946	5996	6046	6096	6146	6196
5047	5097	5147	5197	5247	5297	5347	5397	5447	5497	5547	5597	5647	5697	5747	5797	5847	5897	5947	5997	6047	6097	6147	6197
5048	5098	5148	5198	5248	5298	5348	5398	5448	5498	5548	5598	5648	5698	5748	5798	5848	5898	5948	5998	6048	6098	6148	6198
5049	5099	5149	5199	5249	5299	5349	5399	5449	5499	5549	5599	5649	5699	5749	5799	5849	5899	5949	5999	6049	6099	6149	6199

PLEASE FILL IN COMPLETELY—PRINT OR TYPEWRITE

—USE THIS SLIP FOR JUNE 1952 ISSUE ONLY—

62

NAME ..... TITLE .....

COMPANY .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

Principal Products Manufactured .....

..... Approx. Number of Employees in Plant .....

Check Invested Capital Rating of Your Company

- ☐ Over $1,000,000
- ☐ $500,000 to $1,000,000
- ☐ $200,000 to $500,000
- ☐ $75,000 to $200,000
- ☐ Under $75,000

FIRST CLASS
PERMIT NO. 36
Sec. 34.9 P. L. & R.
Cleveland, Ohio

BUSINESS REPLY ENVELOPE
No Postage Stamp Necessary if Mailed in the United States

4c POSTAGE WILL BE PAID BY—

NEW EQUIPMENT DIGEST
Penton Building
CLEVELAND 13, OHIO

Only those having an engineering, specifying or buying title and connected with a company listed in Dun & Bradstreet as a manufacturer or processer are qualified to receive NEW EQUIPMENT DIGEST on our regular mailing list. The only exceptions to this rule are key men of railroad, steamship and other transportation firms. NEW EQUIPMENT DIGEST is not sent to salesmen, representatives or other distributors.

Only inquiries from individuals who qualify under the above classifications will be serviced if sent to us.

IMPORTANT

Because we must check the distribution of NEW EQUIPMENT DIGEST at least once each year, please fill-in completely the coupon below. If you returned one of our regular mail questionnaires or an inquiry within the past year, you may omit this. The information you give will be held confidential and used only for verifying or correcting our circulation mailing list.

PLEASE FILL IN COMPLETELY—PRINT OR TYPEWRITE

Please send NEW EQUIPMENT DIGEST to me each month free of charge.

NAME ..... TITLE .....

COMPANY .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

Principal Products Manufactured .....

..... Approximate Number of Employees in Plant .....

Also send NEW EQUIPMENT DIGEST free to the following men in our company:

NAME ..... TITLE .....

NAME ..... TITLE .....

Protect
HYDRAULIC EQUIPMENT
WITH HIGH PRESSURE

MICRONIC FILTERS

• 3000 p.s.i. Operating Pressure, Micronic Filtration, Low Pressure differential, Compact in Line Type
• Maximum Protection at minimum cost. Replaceable element.
• Built-In Relief Valve.

WATERMAN ENGINEERING Company
725 CUSTER AVENUE
EVANSTON, ILLINOIS

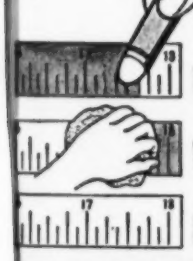
▲ For more details circle NED-5971 on enclosed inquiry slip ▲

ADD THE LAST TOUCH OF ENGINEERED QUALITY TO YOUR PRODUCT WITH . . .

NAMEPLATE PRESS

Now you can stamp neat perfectly aligned letters and figures on all types of nameplates with this easy to operate machine. Machinery Detail Plates—Keys—Tags—Checks and scores of other identification purposes. Fully Guaranteed.

PAINT-STICK

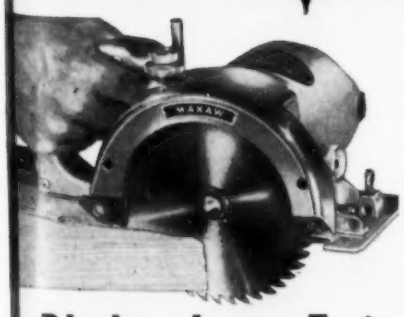


Paint-Stick brings out stamped or engraved impressions on all smooth surfaces. Use is by applying to surface and indentations, then rubbing off the surface with cloth, leaving paint in areas to be marked. Will not rub off or smear. **Sample box of one Dozen assorted colors is available for $5.00.** DEPT. N.E.

THE CLEARVIEW CO., 177 Stanton St. N.Y.C.

▲ For more details circle NED-5972 on enclosed inquiry slip ▲

MAXAW 700
magic pivot does it!



$69.50

Heavy Duty—All Ball-and-Roller Bearing—Industrial Quality

Blades Last *Twice* as Long

MAXAW 700 with Cummins exclusive **magic • pivot** cuts so much deeper at the 45° bevel, gives you so much more blade to spare that blades keep their cutting depth twice as long. This means MAXAW hard-biting "stub-radius" blades take three to four more sharpenings, double their usefulness over other similar blade-size saws costing up to $50.00 more and cut your blade-replacement costs in half. **magic • pivot** does it!

Free Pamphlet— Find out what **magic • pivot** can do for you. Send for Pamphlet D-62.

Cummins-Chicago Corp.
DIVISIONS:
Cummins INDUSTRIALS • Cummins Portable Tools
4740 N. Ravenswood Ave. • Chicago 40, Illinois
IN CANADA: 334 Lauder Ave., Toronto

▲ For more details circle NED-5973 on enclosed inquiry slip ▲

New Literature & Catalogs

Turbine Fluid Mixers

Mixing Equipment Co.—In 32 illustrated pages, catalog B-102 describes turbine-type Lightnin mixers for open and closed tanks, explains how mixing impellers are selected and sized for specific jobs and tells how research is used to develop accurate prediction of fluid agitation results. Latest series E mixers, available in sizes from 1 to 500 hp and offering up to 16 standard AGMA speeds from one basic gear reducer drive, are also featured.

▲ For more details circle NED-5974 on enclosed inquiry slip ▲

Sheet Metal Facilities

Burdett Mfg. Co.—Company's sheet metal designing and production facilities which include ovens, heaters, air makeup units, spray booths and washers are described and illustrated in 12-page "broadview" catalog.

▲ For more details circle NED-5975 on enclosed inquiry slip ▲

Lock Washer Price List

Hobbs Mfg. Co.—Complete information about Tangle-Proof spring lock washers for screws and bolts is contained in 4-page price list 255. Numbers of standard screw and bolt sizes are listed along with size, classification and weight information for high carbon steel, stainless, silicon and phosphor bronze lock washers.

▲ For more details circle NED-5976 on enclosed inquiry slip ▲

Industrial Flooring

Flash-Stone Co.—"Why Engineer an Industrial Floor?" is title of 12-page illustrated brochure which outlines savings that are possible with Flash-Stone floor engineering. Conditions which test the floor engineering job, as well as materials and methods used in constructing or resurfacing a floor are discussed.

▲ For more details circle NED-5977 on enclosed inquiry slip ▲

Machine Jaw Clamps

J & S Tool Co.—Features of All-Purpose jaw clamps used to secure work pieces quickly and rigidly on all standard makes of lathes, planers, milling machines and drill presses are presented in 6-page illustrated bulletin. Jumbo and Lil-Giant clamps for largest planers are featured.

▲ For more details circle NED-5978 on enclosed inquiry slip ▲

Case Hardening Process

Doughty Laboratories, Inc.—24-page "Hard-N-Tuff Idea Book" which contains eight hints to help overcome hardening problems, effect economies and improve results, describes 36 cases in which manufacturers have cut production costs, saved steel and prolonged tool and parts life. Process using Hard-N-Tuff powder type steel hardening compound is given, step-by-step.

▲ For more details circle NED-5979 on enclosed inquiry slip ▲

In Materials-Handling
the Colson® LIFT-JACK System
Lets 1 man do the work of 2

Through production, in and out of storage, on and off freight cars or trucks, Colson Lift-Jacks with wood or steel semi-live skids can easily double the efficiency of conventional hand trucks. You save time, money and space.

Other cost-saving materials-handling equipment by Colson includes drum and barrel trucks, platform trucks, hand trucks and precision built roll-easy wheels and casters for every type of industrial application.

Why not consult a Colson engineer to see how up to date materials-handling equipment can speed up your operations and lower your costs. Write us or consult your phone book for the Colson Representative near you.

Write Today for 56 Page Catalog

THE COLSON CORPORATION
ELYRIA, OHIO

CASTERS • • • • LIFT-JACK SYSTEMS • • • • INDUSTRIAL TRUCKS

▲ For more details circle NED-5980 on enclosed inquiry slip ▲

Even where clearances are small, oil seal replacements are no problem with easy-to-install split-type Clipper Seals.

All you do is: (1) Hook the self-adjusting garter spring around shaft. (2) Spread the seal at the split and slide it over shaft. (3) Slip the garter spring inside its groove in the seal and press assembly into cavity.

Precision molded Clipper Seals are made for sealing against oil, grease, water, air, grit and coolants . . . are available for shafts up to 66" in diameter. Write for Catalog PK-46A. Address: Johns-Manville, Box 60, New York 16, N. Y.

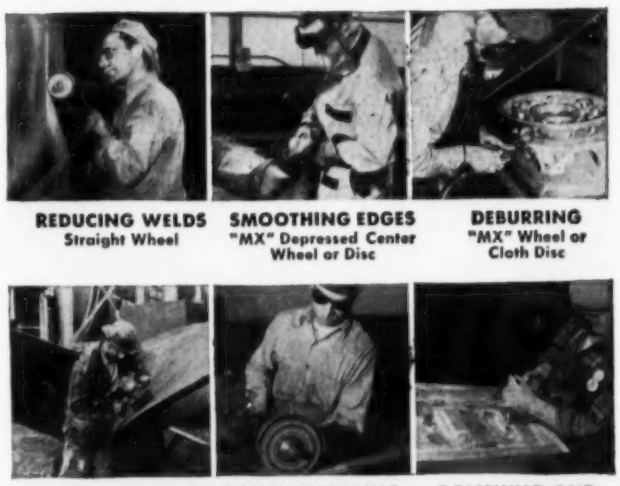
Johns-Manville CLIPPER SEALS

▲ For more details circle NED-5981 on enclosed inquiry slip ▲

ONE SOURCE

...for EVERY TYPE of abrasive in high-speed PORTABLE GRINDING...

...used on EVERY TYPE of portable grinding operation in metalworking...



...more proof that only
CARBORUNDUM
TRADE MARK
offers ALL abrasive products
...to give you the proper ONE

"Carborundum" and "MX" are registered trademarks which indicate manufacture by The Carborundum Company, Niagara Falls, N. Y.

61-67

▲ For more details circle NED-5982 on enclosed inquiry slip ▲

THE INSIDE STORY OF

EX-CELL-O

DRILL JIG BUSHINGS

Here are a few good reasons why Ex-Cell-O Drill Jig Bushings last longer and perform better:

1. Premium grade tool steel is selected for wear resistance and heat treated to 62-64 Rockwell "C".
2. Every bushing must measure up to Ex-Cell-O precision standards, as well as to A.S.A. standards.
3. High finish is ground on inside and outside diameters, and *under the head* for perfect bearing.

To satisfy the needs of your purchasing and engineering departments ask for an adequate supply of Ex-Cell-O Bushing Catalogs.

EX-CELL-O CORPORATION
DETROIT 32, MICHIGAN

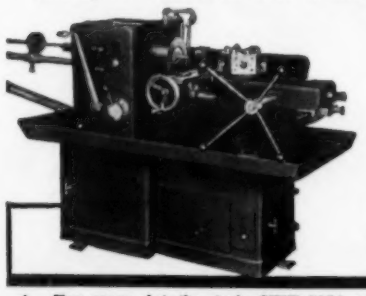
MANUFACTURERS OF PRECISION MACHINE TOOLS • CUTTING TOOLS • RAILROAD PINS AND BUSHINGS • DRILL JIG BUSHINGS • AIRCRAFT AND MISCELLANEOUS PRODUCTION PARTS • DAIRY EQUIPMENT

51-54 XLO

For more details circle NED-5983 on enclosed inquiry slip

No. 601 "RAPIDUCTION" the SIMPLIFIED LATHE

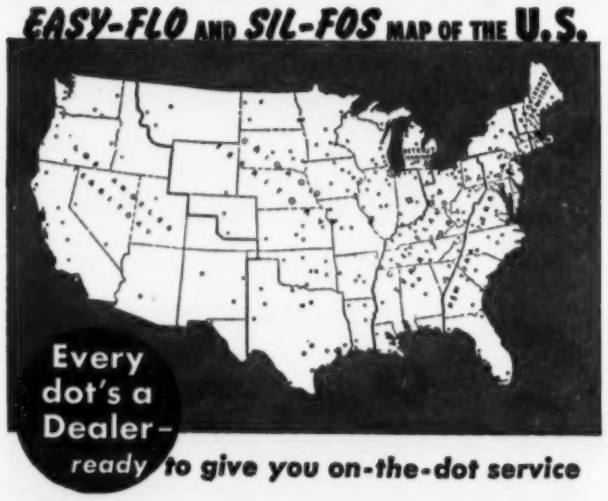
You can train new operators in double-quick time on Oster "RAPIDUCTION" Lathes. Optional features make it economical to equip these machines to meet YOUR needs exactly . . . with worm drive or direct drive . . . with 6-position turret or single tool post . . . with 2-speed or 4-speed motor . . . and other options. Automatic chuck capacity: 1½" round bar. Catalog No. 601 sent promptly. Write:



THE OSTER MFG. CO.
2066 EAST 61st STREET
CLEVELAND 3, OHIO

For more details circle NED-5984 on enclosed inquiry slip

EASY-FLO AND SIL-FOS MAP OF THE U.S.



Wherever you are there's an EASY-FLO and SIL-FOS dealer handy—all set to supply you promptly with these celebrated low-temperature silver brazing alloys—and to help you get the full benefit of the remarkable speed, strength and economy in joining metals that are inherent in EASY-FLO and SIL-FOS brazing.

WRITE TODAY for our dealer list and a copy of the 24-page **BULLETIN 20** which gives the whole amazing story of fast, low-cost brazing with EASY-FLO and SIL-FOS.

HANDY & HARMAN 82 Fulton St., New York 38, N. Y.
Agents in Principal Cities. In Canada: HANDY & HARMAN of Canada, Ltd., Toronto

For more details circle NED-5985 on enclosed inquiry slip

New Literature & Catalogs

Liquid Level Controls

B/W Controller Corp.—36-page catalog entitled "Floatless Liquid Level Controls" contains text, photos, dimensional and schematic drawings descriptive of these controls for any liquid which is a conductor of electricity. They are used for pumping or valving operations, single or multiple signalling, flow control and specialized control purposes. Relays, pump controls, electrodes and holders, contactors, starters and solenoids are covered. Price list A completes issue.

For more details circle NED-5986 on enclosed inquiry slip

Soldering Fundamentals

American Smelting & Refining Co., Federated Metals Div.—Practical information on soldering fundamentals, plus instructions and illustrations aimed at making soldering successful and easy, are offered in 16-page pocket-size booklet "How to Solder."

For more details circle NED-5987 on enclosed inquiry slip

Bulk Material Conveyors

Link-Belt Co.—Photos of Bulk-Flo conveyors and elevators used for handling variety of bulk flowable materials, together with typical layout drawings, engineering data, calculation tables, charts and formulas are contained in 28-page booklet 2475. Over 150 materials are analyzed for average weight and size, flowability and abrasive characteristics.

For more details circle NED-5988 on enclosed inquiry slip

Ring Packing

Greene, Tweed & Co.—Palmetto G-T Ring, a packing that is being used in commercial applications at pressures to 15,000 psi without extruding, is subject of 8-page illustrated bulletin MP-68. Facts covering design, operation, installation and suggested dimensions are given. Packing is used as seals in hydraulic and pneumatic cylinders and valves, welding machines, steering gears, control units and testing equipment.

For more details circle NED-5989 on enclosed inquiry slip

Counting Devices

Production Instrument Co.—Catalog of modern counting devices includes mechanical and electric counters in many sizes and types, automatic batch counters, photoelectric counting units, counter actuating switches and high speed revolution counters.

For more details circle NED-5990 on enclosed inquiry slip

Sheet Metal Fastening

Prestole Corp.—Prestolizing, a method of fastening sheet metal parts and products, is subject of 8-page bulletin D entitled "A Cost-Reducing Program Through Prestolizing." Bulletin gives design and engineering data and describes policy, proper tool selection and punch and die characteristics.

For more details circle NED-5991 on enclosed inquiry slip

Air Diffuser Selection

64-page Selection Manual No. 40 contains technical data for selecting proper air diffusers in air conditioning systems. A revised edition, manual contains a new section on high pressure units for high pressure, high velocity systems. Pictures, performance tables and case examples illustrate the booklet, available to anyone requesting it on company letterhead. Write to Anemostat Corp. of America, 10 E. 39th St., New York 16, N. Y.

For more details circle NED-5992 on enclosed inquiry slip

Electronic Controls, Devices

General Electric Co.—Quick-reference data, photos and listings of additional publications to guide selection of wide range of electric and electronic controls, devices and accessories are presented in 8-page selection bulletin GEA-5781. Products included are motor starters, pushbutton stations, relays, limit switches, solenoids, electronic timers and relays, pressure governor, drives and smoke density controls.

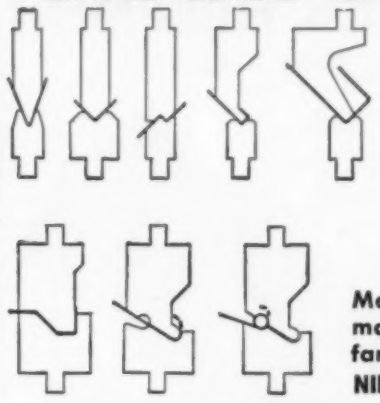
For more details circle NED-5993 on enclosed inquiry slip

Coolant Filtration Systems

Honan-Crane Corp.—Descriptions and illustrations of line of coolant filtration and oil handling equipment, including the Houdaille Web-O-Matic self-cleaning coolant filter are featured in 4-page bulletin. Company's engineering service, including design, construction and installation of this type equipment, is covered as well.

For more details circle NED-5994 on enclosed inquiry slip

BRAKE DIES



MADE FROM FORGED CHISEL STEEL BILLETS

Made by the makers of the famous SEMCO NIBBLER PRESS

- MANY STILL IN USE EVEN AFTER 10, 20 and even 30 YEARS.
- THEY COST MORE BUT THEY LAST FOR YEARS.

Write for Estimates on Your Work and Ask for Latest Literature

SEMCO
SERVICE MACHINE COMPANY
INCORPORATED
202 MILLER STREET, ELIZABETH, N. J.

For more details circle NED-5995 on enclosed inquiry slip

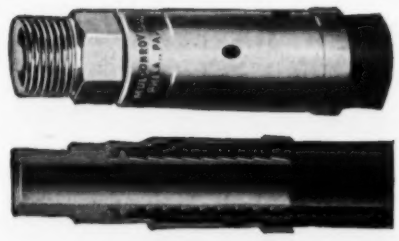
"Skin-Cote protects hands from WET SANDING"

In a recent survey made by a large auto plant in a group of 15 wet sanders working on a hood sanding job, more than half of these men showed considerable irritation of the skin on the wrists and forearms. This group had not as yet been provided with a protective cream. In a second, but much larger group of wet body sanders who were provided with SKIN-COTE No. 3 protective cream, only one case of dermatitis had developed. As far as the plant hygienist could determine, both of these group exposures were of a like character. This company has now adopted SKIN-COTE No. 3 for all wet sanding operations throughout their plant . . . Send for eight-page catalog describing this and many other applications.

The BOYER-CAMPBELL COMPANY
6538 St. Antoine *Safety Division* Detroit 2, Mich.

For more details circle NED-5996 on enclosed inquiry slip

Longer Service Life for Hydraulic Hose!



"PRESS-LOCK"
HYDRAULIC HOSE COUPLINGS

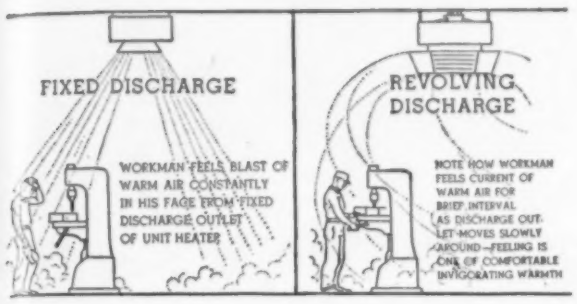
Write for literature completely describing the super-strong, super-efficient "Press-Lock" Coupling. Available on Mulconroy Hydraulic Hose Assemblies for all types of equipment, or attached to *your* hydraulic hose shipped to our factory.

"Mulconroy Starts Where Others Stop"

MULCONROY COMPANY
Hose Specialties Since 1887
5331 JEFFERSON ST., PHILA. 31, PA.

For more details circle NED-5997 on enclosed inquiry slip

What is the BIG difference between revolving and fixed unit heater discharge outlets?



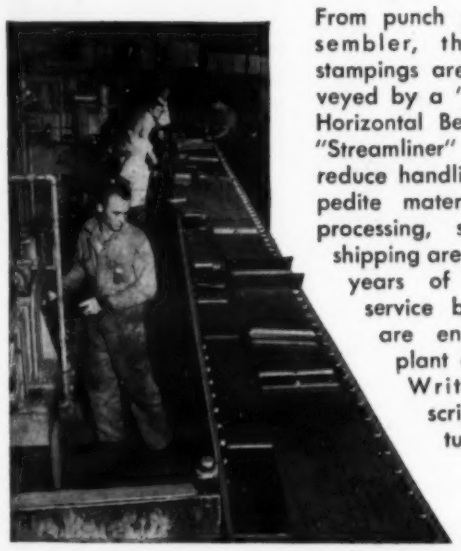
WING REVOLVING UNIT HEATERS are successfully solving the heating problems of thousands of industrial plants today because they assure a uniform comfortable temperature throughout, with no hot blasts, no cold spots, no chilly corners. Instead of annoying hot blasts, the worker is conscious only of a pleasing sensation of fresh, live, invigorating warmth.

L. J. Wing Mfg. Co. Vreeland Mills Road Linden, New Jersey

For more details circle NED-5998 on enclosed inquiry slip

"STREAMLINER" CONVEYOR SYSTEMS

SAVE TIME—MONEY—EFFORT



From punch press to assembler, these metal stampings are being conveyed by a "Streamliner" Horizontal Belt Conveyor. "Streamliner" Conveyors reduce handling costs, expedite materials through processing, storage and shipping areas. They give years of trouble-free service because they are engineered to plant and product. Write for descriptive literature.

HARRY J. FERGUSON COMPANY

133 WEST AVENUE, JENKINTOWN, PENNA.

For more details circle NED-5999 on enclosed inquiry slip

GRIES DIE CAST GEARS & PINIONS ARE BIG NEWS!

DIE CAST IN ONE PIECE!

Gries eliminates costly manufacturing and assembly of 2 to 4 separate parts . . . and the savings are all yours! Independent tests prove zinc alloy gears wear well, as they are to some degree self-lubricating. Integral one-piece assemblies can be made with shafts as well as center holes; ALL parts are produced to individual specifications. Gears available up to 1 5/16" outside diameter by 1/16" face width; wider faces as diameter decreases. Many gears, pinions, and combinations can be furnished without tooling charges from stock dies; there is a nominal charge for extra close precision requirements, and special designs.

Write TODAY for information about Gries standard components
Send specifications for prompt estimates.

America's Foremost Producer of Tiny Zinc Die Castings

GRIES REPRODUCER CORP.

82 Willow Ave., New York 54 • Phone: MOtt Haven 5-7400

For more details circle NED-6000 on enclosed inquiry slip

New Literature & Catalogs

Roof Maintenance & Repair

Tropical Paint & Oil Co.—In words and pictures, 16-page booklet "Saving Old Roofs" illustrates how worn out, leaky roofs can be restored and maintained without problem of high outside labor and material costs. It details steps in preparing roof and application of Tropical roof products from inspection and treatment of coping tile to final steps of application. Flat or sloping roofs; paper and roll roofing; and felt, composition, tar, gravel, slag, concrete, or metal roofs are covered.

For more details circle NED-6001 on enclosed inquiry slip

Industrial Flooring Concrete

Flash-Stone Co.—Dynapact industrial floor concrete used to construct a floor surface that will take heavy loads and withstand abusive and destructive physical forces is described in 20-page illustrated booklet "Traffic Concrete, A Study in Specialization." Rock used in the concrete, its finished construction features and such floor laying phases as power mixing, impacting, rolling, floating and finishing are discussed.

For more details circle NED-6002 on enclosed inquiry slip

Drill Press Feed

Bellows Co.—16-page well illustrated bulletin DF-110, descriptive of the Bellows drill press feed, shows installation photographs, details all parts of the unit and includes dimensional drawings and specification data. Wiring diagrams and electrical hook-ups to combine feed with other packaged pneumatic devices are shown.

For more details circle NED-6003 on enclosed inquiry slip

Basic Brazing

All-State Welding Alloys Co.—Operator-written in language of the man behind the torch, this 16-page illustrated "Brazing Manual" contains data on brazing shapes, sheet, castings, tubing and assemblies of copper, brass, steel, aluminum and cast iron.

For more details circle NED-6004 on enclosed inquiry slip

Polishing & Finishing Abrasives

Weldon Roberts Rubber Co., Brightboy Industrial Div.—Methods and application data on Brightboy elastic-rubber compounds impregnated with abrasive are detailed in 8-page illustrated folder "The Correct Answer." Amount of pressure, typical uses, cleaning and dressing, etc., are explained.

For more details circle NED-6005 on enclosed inquiry slip

Evaporative Air Coolers

Essick Mfg. Co.—Controlled cooling is major feature of line of evaporative air coolers which are subject of 6-page illustrated folder. Seven models are shown along with specifications and dealer information.

For more details circle NED-6006 on enclosed inquiry slip

Stacking drums of liquid soap ceiling high at Eastman Kodak Company, Rochester, N. Y.

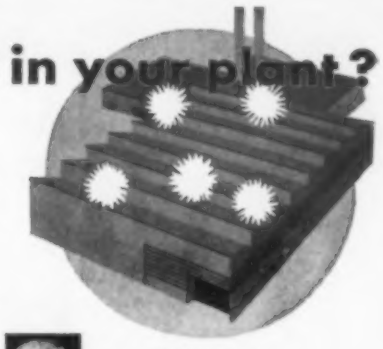
Use every inch . . . stack to the roof, save space, double your storage area. You can do it easily, quickly, economically with a Towmotor fork lift truck. Towmotor handles all types of material. For the name of your nearest Towmotor Representative and a copy of Towmotor's tabloid size magazine on materials handling, write Towmotor Corporation, Div. 25, 1226 E. 152nd St., Cleveland 10, Ohio.

TOWMOTOR THE ONE-MAN-GANG — FORK LIFT TRUCKS and TRACTORS

RECEIVING • PROCESSING • STORAGE • DISTRIBUTION

For more details circle NED-6007 on enclosed inquiry slip

hot spots in your plant?



specify REFRASIL

Play safe! Use REFRASIL to eliminate dangerous "hot spots" in your plant. REFRASIL provides a temperature drop from 1200°F. to 300°F....½" foil blanket withstands sustained exposure to extreme temperatures. REFRASIL is easy to install — easy to remove. So play safe — specify REFRASIL for your high temperature insulation problems.

REFRASIL, light in weight and versatile in use, is available in a variety of physical forms to meet virtually any insulation need—see illustrations at right.

use REFRASIL for...

- Ducts carrying high temperature liquids. (Refrasil Blankets)
- Electric ovens. (Refrasil batt or bulk fibers)
- Laboratory Equipment. (Refrasil cloth and batt)
- Thermocouple wires. (Refrasil sleeving)
- Filtration. (Refrasil bulk fibers)

REFRASIL REPRESENTATIVES:

Eastern: Fred W. Muhlenfeld, 6659 Loch Hill Rd., Baltimore 12, Md.—Valley 3135
Texas, Okla. & Kansas: Thomson Engineering Service, 708 Hemphill St., Fort Worth 4, Texas—Fortune 5340
Midwest: Burnie L. Weddle, 3219 West 29th St., Indianapolis 22, Ind.—Hickory 8685

CONSULTATION SERVICE
Attach this ad to your letterhead and mail to nearest REFRASIL *Representative for consultation service—at no charge.*

HITCO
THE H. I. THOMPSON COMPANY
1739 CORDOVA STREET
LOS ANGELES 7, CALIF.

For more details circle NED-6008 on enclosed inquiry slip

MONARCH

Mono-Cushions®

It's a burly cushion tire made of tough, wear-resistant stock—all the way through. When you need a high capacity for absorbing shock and shock load Mono-Cushions are your best buy—even more desirable where loads are fragile and floor surfaces are rough.

The leading manufacturers of materials handling vehicles use Monarch Tires as original equipment. The manufacturer of your vehicles can supply you, through his distributors, with Monarch Tires engineered for your application.

THE MONARCH RUBBER COMPANY
200 LINCOLN PARK HARTVILLE, OHIO
DETROIT OFFICE, 7-255 GENERAL MOTORS BLDG.

SPECIALISTS IN INDUSTRIAL SOLID TIRES AND MOLDED MECHANICAL RUBBER GOODS

For more details circle NED-6009 on enclosed inquiry slip

▲ For more details circle NED-6010 on enclosed inquiry slip ▲

Another FLASH-O-LENS at work—inspecting jet engine spotwelds

"The FLASH-O-LENS illuminated magnifier is of great value in guarding against any possible flaws in spotwelding jobs on jet engine components," says Mr. M. C. Ring, in charge of jet assembly and tooling inspection at Ryan Aeronautical Company, San Diego, California.

FLASH-O-LENS *illumination* puts light on the field of vision—and *not* in the worker's eyes. FLASH-O-LENS *magnification* gives sharp, detailed enlargement for accurate inspection.

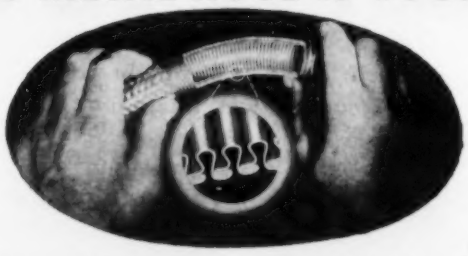
You can save inspection time—improve product quality—with this compact instrument. Write today for free literature.

E.W. PIKE & COMPANY

492 NORTH AVE. ELIZABETH 3, N. J.

▲ For more details circle NED-6011 on enclosed inquiry slip ▲

WHICH OF 1001 USES FOR THIS METAL HOSE IS YOURS?



Are you overlooking an opportunity to improve the performance, life, or salability of your equipment with metal hose?

Yours may be one of the hundreds of undiscovered uses for metal hose—especially for flexible, pressure-tight TITEFLEX® Metal Hose.

The special construction of Titeflex, and the variety of alloys, sizes, and fitted lengths enable you to combat severe temperature, pressure, and corrosion conditions where a flexible connection is necessary.

For maximum results, ask us for design suggestions and help in hose selection.

Titeflex

Let Our Family of Products Help Yours

MAIL COUPON TODAY

TITEFLEX, INC.
507 Frelinghuysen Ave., Newark 5, N.J.
Please send me information about Titeflex Metal Hose and its applications.

NAME_____
TITLE_____
COMPANY_____
ADDRESS_____
CITY_____ ZONE____ STATE____

▲ For more details circle NED-6012 on enclosed inquiry slip ▲

New Literature & Catalogs

Abrasive Impregnated Rubber

Weldon Roberts Rubber Co., Brightboy Industrial Div.—How Brightboy Fine-Tex and Tuff-Tex, elastic-rubber compounds impregnated with abrasive, can be used for deburring, finishing and polishing metals is covered in detail in 12-page illustrated catalog. Data on uses, recommended speeds and types, grades and sizes available in various forms are covered.

▲ For more details circle NED-6013 on enclosed inquiry slip ▲

Web-Type Filter

Honan-Crane Corp.—How coolant filtration costs can be cut up to 75 per cent with the Houdaille Web-O-Matic self-cleaning web type filter for machine tools or small coolant systems is related in 4-page bulletin. Ramp and bottom discharge models for mineral or soluble oil coolants are shown along with specification charts on both types.

▲ For more details circle NED-6014 on enclosed inquiry slip ▲

Industrial Power Sweepers

Wilshire Power Sweeper Co.—Two 4-page bulletins, S-102 and S-103, describe and illustrate line of multipurpose industrial power sweepers for all types of floor and pavements, both exterior and interior. Sweepers are made in 48-in. and 36-in. models which will sweep 90,000 and 65,000 sq ft per hour, respectively. Machines have dust and debris separators.

▲ For more details circle NED-6015 on enclosed inquiry slip ▲

Valves Catalog

Enlarged and revised, latest edition of the "Equivalent Valves" manual contains 170 loose-leaf pages comparing valves of eighteen leading manufacturers by material, type, pressure rating and structural variation. Over 50,000 figures, names and descriptions are posted. Price is $25. Published by Equivalent Valves Co., P. O. Box 816, Station H, Los Angeles 44, Calif.

▲ For more details circle NED-6016 on enclosed inquiry slip ▲

Concrete Floor Topper

Flash-Stone Co.—"Traffic Concrete—A Study in Specialization" is the title of 20-page illustrated bulletin which outlines advantages of Dynapakt concrete floors in terms of materials used and methods of installation. High density, extremely hard topping is obtained by process which depends upon proper material selection, proper formulation and power-driven installation equipment.

▲ For more details circle NED-6017 on enclosed inquiry slip ▲

How You Can Use Microwave

Radio Corp. of America—Latest developments and potentialities in radio equipment for point-to-point communication and remote control are described and illustrated in 20-page booklet "What Is Microwave." It explains how any factor that can be translated into an electrical impulse, such as pressure, temperature or engine speed, can be transmitted by means of microwave equipment. It also starts, stops and regulates equipment at unattended stations.

▲ For more details circle NED-6018 on enclosed inquiry slip ▲

Small Zinc Die Castings

Gries Reproducer Corp.—Eight illustrated and diagrammed pages of this booklet present data on properties, design advantages and uses of small zinc die castings. A chart compares relative cost, production and design features of various fabricating methods. Composition and properties of alloys are detailed.

▲ For more details circle NED-6019 on enclosed inquiry slip ▲

Safety Gloves & Equipment

Over 1000 different safety items are included in 48-page illustrated catalog No. 22. Covered are wide variety of gloves for every industrial use, safety clothing, hoods and goggles. Most items are available in men's and women's sizes. Available only by request on company letterhead direct to Olympic Glove Co., 95 Madison Ave., New York 16, N. Y.

▲ For more details circle NED-6020 on enclosed inquiry slip ▲

Extruded Plastic Pipe Fittings

Tennessee Eastman Co.—Using detailed diagrams, 16-page booklet "Fittings for Pipe Extruded of Tenite" describes fabrication of various fittings from extruded pipe lengths and methods of installation. Molded Tenite fittings and special plastic and metal couplings for joining Tenite to metal are covered.

▲ For more details circle NED-6021 on enclosed inquiry slip ▲

Which do you have?

"Shortstub" ELECTRODE HOLDERS

Convert the total fluxed portion of every electrode into weld metal — REDUCE STUB WASTE TO A MINIMUM

TWO SIZES FILL ALL NEEDS

Write for free 16 page booklet "How to Conserve Electrodes"

SPECIFICATIONS

Length Inches	Wt. Ozs.	Cap. Amps.	Electrode Size	List Price
8⅞"	17	400	1/16 to ¼"	$6.90
10⅞"	24	600	3/32 to ⅜"	7.90

Quantity Prices Save You 10 to 20%

Manufactured By
BERNARD WELDING EQUIPMENT COMPANY
10228 AVENUE N, CHICAGO 17, ILLINOIS

▲ For more details circle NED-6022 on enclosed inquiry slip ▲

The Case of the Missing PAINT SPRAY BOOTH

RP Paint Arrestors Applications Like This Can Solve the Space, Cost, Delay Problems of Conventional Paint Spray Booths.

In the above installation, R-P Paint Arrestors are under the floor grill—saving valuable floor space for other uses. Many, many other installations are possible with versatile R-P Paint Arrestors.

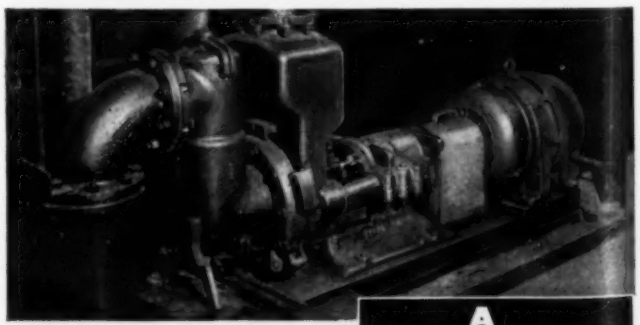
WRITE FOR FREE BOOKLET

Helpful, informative suggestions to solve your paint spray booth problems. Write today.

RESEARCH PRODUCTS CORPORATION
Dept. N, Madison 10, Wisconsin

RP . . . PRODUCTS OF RESEARCH

▲ For more details circle NED-6023 on enclosed inquiry slip ▲



A NAGLE PUMP IS THE MAINTENANCE MAN'S BEST FRIEND

NAGLE Pumps are designed to eliminate shut-downs and maintenance. The 4" type "AW" self-priming pump shown, handling pickling solution at a Gary tin plate mill, features an easy-to-clean basket strainer, clamp-on quick off end plate, readily accessible stuffing box, fast sleeve type slip-page seal adjustment and split-bearing stand—top half lifts off. Pump can be rapidly dismantled. Water end parts of the corrosion resistant alloy best suited to your needs. No wonder more and more plants are standardizing on Nagles. A wide range of horizontal and vertical shaft pumps — ALL for corrosive and abrasive applications. Get the facts!

NAGLE PUMPS

NAGLE PUMPS, INC.
1265 CENTER AVENUE, CHICAGO HEIGHTS, ILLINOIS

PUMPS FOR ABRASIVE AND CORROSIVE APPLICATIONS

▲ For more details circle NED-6024 on enclosed inquiry slip ▲

STANDARDIZE

with OHIO "STOCK" GEARS and REDUCERS

Cut costs without sacrificing quality by standardizing with Ohio STOCK gears and speed reducers. Available in an infinite variety of types, sizes, capacities and ranges. 1000 to 1 your power transmission problems can be solved with Ohio STOCK gears and reducers usually "off the shelf" of your nearest Ohio Gear distributor.

ESTABLISHED 1915
THE OHIO GEAR COMPANY
1320 EAST 179TH STREET • CLEVELAND 10, OHIO

Ohio STOCK gears and reducers are made to precision standards in production quantities to cut costs to you.

OHIO GEARS

For more details circle NED-6025 on enclosed inquiry slip

ACE PLASTIC EXTRUSION

PLUS FABRICATION

FROM RODS, SHEETS, TUBES, SPECIAL SHAPES

Extruded parts from the raw material to the finished product . . . an Ace specialty. Ace Plastic rods, tubes and shapes are custom extruded and machined automatically to your most exacting specifications. Let our engineers assist you with your plans.

WRITE TODAY FOR SAMPLES; send prints for quotations.

By the manufacturers of famous Ace Nylon Balls

ACE HIGH QUALITY

ACE PLASTIC COMPANY
Precision Plastic Fabricators and Extruders

91-28 Van Wyck Blvd. • Jamaica 2, N. Y.

For more details circle NED-6026 on enclosed inquiry slip

Star has 'em

WHEN YOU WANT 'EM!

STAINLESS STEEL FASTENINGS OF ALL TYPES RIGHT OFF THE SHELF

In-Stock-Service on small or large quantities • Cap Screws • Machine Screws • Sheet Metal and Wood Screws • Set Screws • Nuts, Washers, Etc.

Class 3 AN Drilled Fillister Heads

Fast service on special screw machine products.

WRITE, WIRE OR PHONE TODAY
New Catalog just off the press—write today.

Star STAINLESS SCREW CO.
ARmory 4-1240
214 Union Avenue • Paterson 2, N. J.

For more details circle NED-6027 on enclosed inquiry slip

New Literature & Catalogs

Precoated Metal Strip

Coated Coil Corp. — Production advantages of Enamelstrip, metal strip stock that is precoated in color, are described and illustrated in 4-page folder "These Products Were 'Finished' Before Fabricating." Coating, available on cold rolled steel, electro-galvanized steel, electrolytic tin plate, brass, zinc and aluminum, withstands drawing, bending and forming without cracking or peeling. Actual sample is included.

For more details circle NED-6028 on enclosed inquiry slip

Electrical & Chemical Insulators

M. Kirchberger & Co.—Lava insulators, produced to individual specifications from kiln-hardened steatite for use as insulators in the electrical and chemical industries, are described in two booklets "Lava Insulators for Electronic Tubes" and "Lava for Industry." Insulators feature high dielectric strength, thermal shock resistance, mechanical accuracy and noncarbonizing quality.

For more details circle NED-6029 on enclosed inquiry slip

How To Run a Metal Shaper

Set-up and operation of South Bend 7-in. metal-working bench shaper is thoroughly covered in 32-page handbook, containing 65 photos, diagrams and exploded views. It tells how to grind formed tool bits for shaper cuts and is written so that the fine points will not go over the beginner's head. Available for 25 cents from South Bend Lathe Works, 307 E. Madison St., South Bend 22, Ind.

For more details circle NED-6030 on enclosed inquiry slip

Twisted Wire Brushes

Mill-Rose Co.—56 standard sizes of precision-made wire brushes are listed in 4-page illustrated bulletin "Twisted Wire Brushes." These standard brushes include single and double spiral tube types in diameters ranging from 1/8 to 1 in. Also shown are special sizes and shapes that can be produced.

For more details circle NED-6031 on enclosed inquiry slip

Textile Motors & Controls

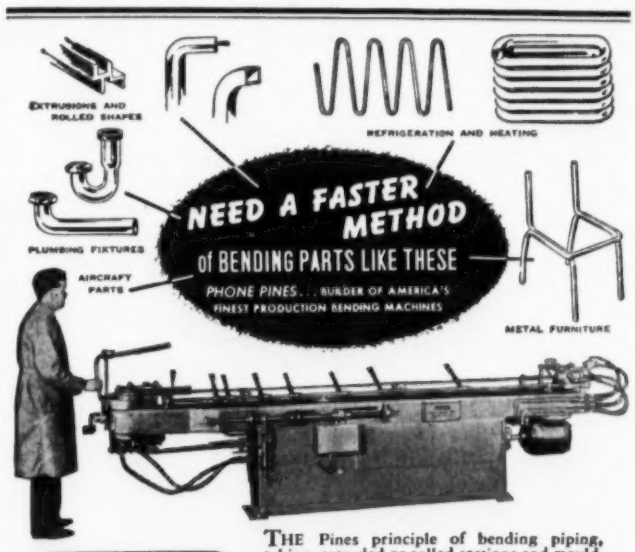
Westinghouse Electric Corp.—32-page illustrated booklet B-5422 is entitled "Motors and Controls for the Textile Industry." Problems common to this industry such as lint clogging, shock and vibration, corrosion, and speed and tension control are discussed. Co-ordinated engineering, manufacturing, application, repair and other facilities for this field are given.

For more details circle NED-6032 on enclosed inquiry slip

Electronic & Electrical Components

Cambridge Thermionic Corp.—102-page illustrated catalog is comprehensive listing of electronic and electrical components such as connectors, terminals, fittings, coil forms, terminal boards, wound coils and similar devices. Both standard and custom-built components are offered.

For more details circle NED-6033 on enclosed inquiry slip



COST CUTTING FEATURES OF PINES BENDERS

- Produces Accurate Uniform Bends without marking or distorting.
- Push-Button Control — simple, easy for one man to operate.
- Highly Versatile — handles wide variety of work — serpentine, coil, compound or multiple bends.
- Fast Set-Ups — tool changes in 10 minutes.
- Superior Design — tapered alloy-steel spindle, adjustable gibs, Timken bearings, Vickers pump

THE Pines principle of bending piping, tubing, extruded or rolled sections and mouldings, employes tested and proven methods that assure best results and peak production. Roll, compression, draw, and stretch bending methods are skillfully adapted to best suit your material and product needs. Hydraulic power, push-button control and automatic operation is combined to assure high efficiency and lower production costs. Ask Pines to analyze your bending problems now. Phone Aurora 2-7608.

WRITE FOR FREE LITERATURE
Find out how the Pines Benders are designed to save time and cut costs. Literature describes and pictures various models, attachments, and methods on actual jobs.

PINES ENGINEERING CO., Inc.
Specialists in Tube Fabricating Equipment
639 WALNUT AURORA, ILLINOIS

For more details circle NED-6034 on enclosed inquiry slip

one million LBS. SPEED PATCH

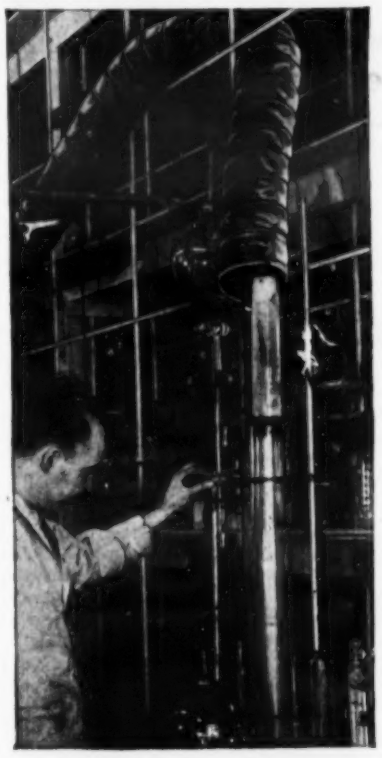
WORLD'S FINEST, FASTEST, FLOOR FIXER!

SHIPPED TO A SINGLE CUSTOMER

Actually 1,044,014 lbs., Speed-Patch have been purchased by this ONE company. And other customers add up to *more millions* of pounds of proof that Speed-Patch knows no equal. Write for the full Speed-Patch story TODAY!

ROCK-TRED Corporation
Manufacturers of a Complete Line of Building Maintenance Materials
7440-7450 North St. Louis Avenue • Skokie, Illinois
In Canada: Rock-Tred Corporation (Canada) Limited, Toronto 5

For more details circle NED-6035 on enclosed inquiry slip



Why move work around

TO GET TO PRESENT EXHAUST DUCTING?

Take SPIRATUBE® to the job!

With SPIRATUBE — the new-type flexible ducting — you can set up production lines where you want them without expensive changes in your dust or fume removal system. SPIRATUBE connects quickly, easily to your present lines — and bends anywhere with minimum crimping. No turn is too short, no angle too acute. No elbows or special fittings to bother with in going around obstructions.

Best of all, YOU CAN INSTALL SPIRATUBE YOURSELF! That cuts down-time, keeps your production line going. The initial cost of Spiratube is small . . . and its life equals — sometimes exceeds — rigid ducts.

Standard sizes for all requirements are immediately available from well-stocked distributors — coast-to-coast!

For all ducting systems:

SPIRATUBE® FLEXFLYTE® AYRTUBE®

Flexible Tubing CORPORATION

Guilford, Connecticut Pasadena 1, California

FREE! Full details on this amazing, cost-saving ducting. Fill in coupon and mail.

Please send me your new catalog on Flexible Tubing products.

My application is_____

Name_____

Title_____

Company_____

Address_____

City_____ State_____

NED-1

For more details circle NED-6036 on enclosed inquiry slip

PANEL MARKING

★ EASY
★ FAST
★ SURE

Simplify your nameplate panel marking with the Matthews "222" Nameplate Marking Machine.

Nameplates with your combination of panels can be marked easily with either the pneumatic, hydraulic or hand operated nameplate units.

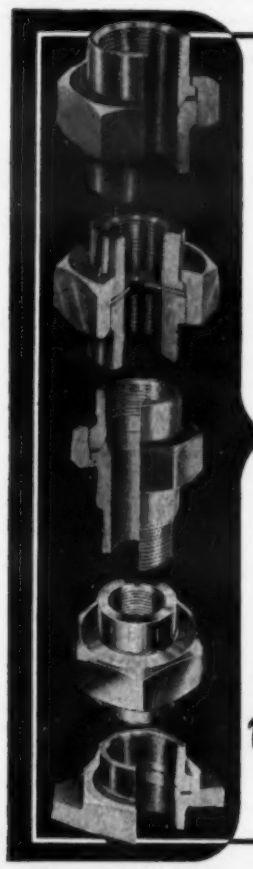
It's Matthews "222" marking for:

- PERFECT ALIGNMENT
- FAST PRODUCTION
- CONTROLLED DEPTH
- LOW COST

Write today for Bulletin B-6.

JAS. H. MATTHEWS & CO.
3943 FORBES ST. • PITTSBURGH 13, PA.
NEW YORK • BOSTON • PHILADELPHIA
CHICAGO • CLIFTON, N. J.

For more details circle NED-6037 on enclosed inquiry slip



A TYPE FOR EVERY USE!

Catawissa PERFECT SEAL Unions

for all temperatures for all pressures!

Catawissa Unions are HOT FORGED from solid rectangular steel bars to give sure-fire piping dependability! Exclusive Ball-to-Angle seat design gives A PERFECT SEAL EVEN WITH PIPE NOT IN ALIGNMENT!

There's a Catawissa Union for every use, temperature and pressure . . . Standard and Double Extra Heavy; Orifice; Male & Female; Full Stainless, Full Alloy; Lug Nut. Choice of seats and socket weld or screwed ends.

Write for Catalog

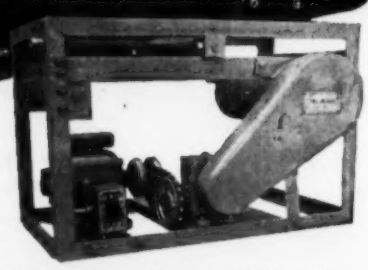
STOCKED BY LEADING INDUSTRIAL DISTRIBUTORS

CATAWISSA VALVE & FITTINGS CO.
250 Mill St. • CATAWISSA, PA.

For more details circle NED-6038 on enclosed inquiry slip

Make YOUR OWN
BELT CONVEYOR
and drive it with a
PAKAGE POWER UNIT

THE BEST POWER UNIT ON THE MARKET



If you plan to build your own belt conveyor using wood frames, tables or roller gravity—the annoying problem of calculating speeds, figuring proper size bearings, pulleys, shaft diameters, reducer torque, roller chain size, sprocket ratio—can be eliminated by using an Island Pakage Power Unit . . . a scientifically engineered

SELF-CONTAINED BELT CONVEYOR DRIVE

Pakage Power Units are compact, portable and come completely assembled ready to be easily bolted to the chassis of the conveyor to be driven. Over 1000 Now in Regular Service. Get the facts on how these practical, multiple-use units can increase efficiency and lower costs.

FREE!

ISLAND EQUIPMENT CORP. Dept. NE6
27-01 Bridge Plaza North
Long Island City 1, N. Y.

Sounds good to me. Send brochure on Pakage Power Units and various applications.

NAME_____
ADDRESS_____
CITY_____ STATE_____

For more details circle NED-6039 on enclosed inquiry slip

Index to Advertisers

A

A'G'A' Division of Elastic Stop Nut Corp. of America. 30
Abrasive Products, Inc. 41
Accurate Spring Mfg. Co. ... 85
Ace Plastic Co. 109
Acme Electric Corp. 94
Acromark Co. 9
Acushnet Process Co. 31
Adams, R. P., Co. 5
Aerco Corp. 100
Aget-Detroit Co. 17
Air Associates 2
Air Reduction Co. 76
Airborne Accessories Corp. .. 82
Aircraft-Marine Products, Inc. 59
Airetool Mfg. Co. 28
Airlarm 11
Ajax Flexible Coupling Co... 78
Alan Wood Steel Co. 61
Albion Industries, Inc. 22
Allen-Bradley Co. 61
Allis-Chalmers Mfg. Co. 27, 45, 62, 102
Alpha Corp. 51
Alter, Harry, Co. 50
Aluminum Co. of America ... 18
Alvey Conveyor Mfg. Co. 18
Alvey-Ferguson Co. 34
American Air Filter Co. 37
American Blower Corp. 75
American Chain & Cable Co. 13, 15, 16, 20
Amer. Encaustic Tiling Co., Electronics Div. 95
American Monorail Co. 53
American Non-Gran Bronze Co. 79
American Olean Tile Co. 95
American Optical Co. 83
American Pulley Co. 56
American Pullmax Co. 32
American Recording Chart Co. 20
American Stock Gear Div. Perfection Gear Co. 40
American Wheelabrator & Equip. Corp. 61
Ames, B. C., Co. 80
Amperite Co. 2
Andrews-Alderfer Co. 102
Arcos Corp. 75
Armour & Co. 63
Armstrong Bray & Co. 11
Armstrong Bros. Tool Co. .. 99
Aro Equipment Corp. 21
Art Wire & Stamping Co. ... 42
Artos Engineering Co. 36
Ashworth Bros., Inc. 48
Assembly Products, Inc. 38
Associated Research, Inc..... 101
Atlas Press Co. 102
Aurand Mfg. & Equip. Co. .. 11
Automatic Transportation Co. 95
Automotive & Aircraft Div., Amer. Chain & Cable Co. .. 20
Avery Adhesive Label Corp... 72

B

Babcock & Wilcox Co., The Tubular Products Div. 85
Bakelite Co., Div. of Union Carbide & Carbon Corp.... 91
Baker Ind. Truck Div. of The Baker-Raulang Co. 16
Bal, William, Corp. 23
Baldwin-Lima-Hamilton Corp. 46
Barber-Colman Co. 59
Barrett-Cravens Co. 58
Bassick Co. 14
Bath, Cyril, Co. 48
Bay Metal Products 85
Bear Mfg. Co. 79
Beaver Pipe Tools, Inc. 51
Belgian Electric Sales Corp... 88
Bellows Co. 78
Belt Corp. 17
Bendix Aviation Corp..25, 40, 103
Bernard Welding Equipment Co. 108
Beverly Shear Mfg. Co. 84
Big Joe Mfg. Co. 5
Bin-Dicator Co. 97
Black & Decker Mfg. Co...21, 112
Black Diamond Saw & Machine Works, Inc. 103
Black Drill Co. 56
Black & Webster, Inc. 24
Blackhawk Mfg. Co. 33
Blastcrete Equipment Co. ... 98
Blaw-Knox Div. of Blaw-Knox Co. 38
Bostitch, Inc. 38
Boston Woven Hose & Rubber Co. 77
Bowser, Inc. 89
Boyer-Campbell Co. 106
Bradley Washfountain Co. .. 103
Brady, W. H., Co. 39, 102
Breeze Corp. 40
Briggs & Stratton Corp. 13
Brown, W. R., Corp. 61
Brown Engineering Co. 18
Browning Mfg. Co. 2
Bruning, Charles, Co. 31, 68
Buck Tool Co. 111
Buda Co. 92
Buell Engineering Co. 64
Buffalo Forge Co. 104
Buffalo Weaving & Belting Co. 30
Burgess-Manning Co. 52
Burke & James, Inc. 4
Burke Machine Tool Co. 58
Buschman, E. W., Co. 10
Bussman Mfg. Co. 69

C

Cam Tool Co. 12
Cambridge Wire Cloth Co. ... 45
Camcar Screw & Mfg. Corp. . 70
Cameron Iron Works, Inc. ... 41
Cannon Electric Co. 104
Carborundum Co. 8, 105
Carpenter Steel Co. 37, 72
Carter Products Co. 77
Catawissa Valve & Fittings Co. 110
Central Safety Equipment Co. 71
Chain Belt Co. 26
Challenge Machinery Co. 49
Champion Pneumatic Machinery Co. 19
Chart-Pak, Inc. 77
Chelsea Fan & Blower Co. ... 65
Chicago Eye Shield Co. 38
Chicago Hardware Foundry Co. 64
Chicago Rawhide Mfg. Co. .. 53
Chicago Tool & Engineering Co. 63
Chicago Wheel & Mfg. Co. .. 78
Chisholm-Moore Hoist Corp... 9
Cincinnati Electrical Tool Co. 19
Clancy, J. R., Inc. 35
Clarin Mfg. Co. 69
Clark Controller Co. 56
Clark Ind. Truck Div. of Clark Equip. Co. 53
Clarke Sanding Machine Co... 32
Clearview Co. 105
Cleveland Cap Screw Co. ... 52
Cleveland Crane & Engineering Co. 35, 68
Cleveland Grinding Machine Co. 45
Cleveland Vibrator Co. 8
Cleveland Worm & Gear Co.. 81
Climax Molybdenum Co. 6
Clinton Machine Co., Warner Div. 40
Clipper Mfg. Co. 100
Coated Coil Corp. 11
Colonial Rubber Co. 70
Colson Corp. 105
Columbia Electric Mfg. Co. .. 65
Columbia-Geneva Steel Div... 80
Commander Mfg. Co. 85
Commercial Shearing & Stamping Co. 29
Cone-Drive Gears Div., Mich. Tool Co. 27
Congress Drives 14
Continental-Diamond Fibre Co. 97
Convoy, Inc. 53
Coppus Engineering Corp. ... 48
Cover, H. S. 8
Cramer, R. W., Co. 74
Crane Co. 88
Crane Packing Co. 44
Crown Industrial Products Co. 57
Cullen-Friestedt Co. 88
Cummins-Chicago Corp. 105
Cuno Engineering Corp. 47
Curran Corp. 47

D

Dake Engine Co. 3
Dart Union Co. 60
Dayton Safety Ladder Co. ... 28
Defiance Machine & Tool Co.. 2
DeLaval Steam Turbine Co... 35
Delta-Rockwell Power Tool Div. 32
Denison Engineering Co. 23
Detroit Elec. Furnace Div. Kuhlman Elec. Co. 10
Detroit Power Screwdriver Co. 35
Detroit Stamping Co. 87
DeWalt, Inc. 76
Diagraph-Bradley Industries, Inc. 2
Dial Light Co. of America... 44
Diamond Chain Co. 34
Diebold, Inc. 2
Dietzgen, Eugene, Co. 63
Dillon, W. C., & Co. 43
Dixon Research Inc. 24
Dixon Valve & Coupling Co. 10
DoAll Co. 29, 98
Dodge Mfg. Corp. 49
Doepke, Chas. Wm., Mfg. Co. 99
Downs Crane & Hoist Co. ... 84
Dravo Corp. 31
Dresser Mfg. Div. Dresser Industries, Inc. 35
Duff-Norton Mfg. Co. 3
du Mont Corp. 101
Dunham, C. A., Co. 24
du Pont de Nemours, E. I., & Co., Rubber Chemicals Div. 51
Dura-Tred Co. 6

E

Eastman Kodak Co. 31, 89
Eclipse Machine Div., Bendix Aviation Corp. 25
Economy Engineering Co. ... 15
Edmont Mfg. Co. 42
Elastic Stop Nut Corp. of America 81
Electric Controller & Mfg. Co. 34
Electro-Therm Inc. 87
Elwell-Parker Electric Co. ... 90
Enterprise Machine Parts Corp. 68
Equipment Mfg., Inc. 33
Essex Wire Corp. 12, 59
Eutectic Welding Alloys Corp. 69
Exact Weight Scale Co. 69
Ex-Cell-O Corp. 106

F

Fabri-Valve Co. of America.. 92
Fafnir Bearing Co. 50
Fairbanks, Morse & Co. 75
Farrelloy Co. 112
Faultless Caster Corp. 86
Federal Press Co. 66
Federal Products Corp. 91
Felt Products Mfg. Co. 46
Fenwal, Inc. 46
Ferguson, Harry J., Co. 107
Fidelity Chemical Products Corp. 81
Field, Walter W., & Son Inc. 100
Fischer & Porter Co. 55
Flash-Stone Co. 15
Flexible Steel Lacing Co. 93
Flexible Tubing Corp. 109
Flexrock Co. 21, 112
Foote Bros. Gear & Machine Corp. 103
Foxboro Co. 5
French & Hecht Div. Kelsey-Hayes Wheel Co. ... 80
Fries Instrument Div. Bendix Aviation Corp. 40
Fuller Co. 83
Fuller Brush Co. 24

G

Galland-Henning Mfg. Co. ... 16
Gardner Machine Co. 50
Gast Mfg. Corp. 75
General Box Co. 35
General Electric Co..21, 23, 54, 71
General Plate, Div. Metals & Controls Corp. 82
General Radio Co. 59
General Scientific Equipment Co. 9
General Tire & Rubber Co... 12
Geneva Machine & Tool Corp. 91
Georgia-Pacific Plywood Co... 93
Geroter May Corp. 84
Gerrard Steel Strapping Div. United States Steel Co. ... 33
Globe Co. 100
Globe Hoist Co. 39
Goggle Parts Co. 54
Goodrich, B. F., Co. 36
Gotham Instruments Div. Amer. Machine & Metals.. 62
Greenlee Tool Co. 44
Green-Penny Co. 54
Gries Reproducer Corp. 107
Grieve-Hendry Co. 80
Grinnell Co. 70
Grip Nut Co. 84
Guardian Electric 98

H

Hallemite Mfg. Co. 4
Hamilton Tool Co. 78
Hammond Machinery Builders, Inc. 39
Hanchett Magna-Lock Corp... 25
Handy & Harman 106
Hanna Engineering Works.... 97
Hannifin Corp. 30, 73, 99
Hansen, A. L., Mfg. Co. 18
Harman Associates 80
Harnischfeger Corp. 22, 91
Harper, H. M., Co. 17
Harrington Co. 90
Harris-Barrier, Inc. 19
Hays Corp. 73
Heinemann Electric Co. 49
Hein-Werner Corp. 25
Hetherington & Berner Inc... 36
Hewitt-Robins, Inc. 25
Hild Floor Machine Co. 50
Hill Acme Co. 48
Hills-McCanna Co. 36
Homer Mfg. Co. 10
Homestead Valve Mfg. Co. ... 28
Honan-Crane Corp. 56, 57
Hoover Ball & Bearing Co. .. 94
Houghton, E. F., & Co. 49
Hunt, Rodney, Machine Co..31, 66

I

Ideal Industries, Inc. 3
Illinois Testing Laboratories, Inc. 33, 72
Industrial Engrng. Equip. Co. 36
Industrial Engineering & Mfg. Co. 54
Industrial Gear Mfg. Co. 103
Industrial Marking Equipment Co. 96
Industrial Products Co. 26
International Nickel Co. 5
International Staple & Machine Co. 57
Invincible Vacuum Cleaner Mfg. Co. 14
Ironbound Box & Lumber Co. 53
Irvington Varnish & Insulator Co. 16
Island Equipment Corp. 110

J

Jabsco Pump Co. 95
Jefferson Electric Co. 46
Jeffrey Mfg. Co. 66
Jelliff, C. O., Mfg. Corp. 86
Johns-Manville 105
Johnson Bronze Co. 63
Johnson Corp. 97
Johnson Mfg. Corp. 39
Jones, Howard B., Div., Cinch Mfg. Corp. 68

K

Kalamazoo Tank & Silo Co., Machine Tool Div. 21
Kelsey-Hayes Wheel Co., French & Hecht Div. 80
Kennametal, Inc. 95
Kett Tool Co. 14
Key Co. 76
Klemp Metal Grating Corp. .. 82
Koiled Kords, Inc. 5
Kold-Hold Mfg. Co. 97
Krieg, Victor J., Inc. 6
Kuhlman Elec. Co. Det. Elec. Furnace Div. ... 10

L

Lamson Corp. 102
Lamson & Sessions Co. 83
Lapeer Mfg. Co. 88
Leiman Bros., Inc. 38
Lewis Welding & Eng. Corp. . 101
Libbey • Owens • Ford Glass Co. 52
Lift Trucks, Inc. 112
Lima Electric Motor Co. 53
Link-Belt Co. 55
Littell, F. J., Machine Co. .. 54
Logan Co. 4
Logansport Machine Co. 58
Lovejoy Flexible Coupling Co. 88
Lyon-Raymond Corp. (See Raymond Corp.) 96

Mc

McCord Corp. 31

M

Maas & Waldstein Co. 28
Magline, Inc. 33
Manheim Mfg. & Belting Co. . 65
Markem Machine Co. 60
Mason-Neilan Regulator Co. . 58
Mateer, G. Diehl, & Co. 7
Mathews Conveyer Co. 56, 57
Mathewson Machine Works .. 70
Matthews, Jas. H., & Co. ... 110
May-Fran Engineering, Inc. .. 37
Mead Specialties Co. 30, 65
Mechanical Handling Systems, Inc. 20
Mehl Mfg. Co. 36
Merrill Bros. 81
Metal Goods Corp. 85
Metal & Thermit Corp. 84
Metals & Controls Corp. ..27, 82
Metzgar Co. 94
Meyers, W. F., Co. 52
Michigan Tool Co. 27
Micro Switch, Div. of Minneapolis-Honeywell Regulator Co. 45
Midland Industrial Finishes .. 93
Mill-Rose Co. 48
Milton Roy Co. 80
Minneapolis - Honeywell Regulator Co. 11, 45
Mitts & Merrill 89
Modern Machine Tool Co. ... 23
Monarch Rubber Co. 107
Morris Machine Works 37
Morse Mfg. Co. 29
Mortell, J. W., Co. 112
Morton Machine Works 4
Motch & Merryweather Machinery Co. 24
Moto-Truc Co. 98
Mueller Brass Co. 97
Mulconroy Co. 106
Multistamp Co. 86
Murphy & Miller, Inc. 89
Murray Company of Texas ... 111
Mystik Adhesive Products ... 52

N

Nagle Pumps, Inc. 108
National Dryer Sales Corp. .. 7
National Electric Products .. 16
National Lock Washer Co. .. 47
National Plastic Co. 87
National Screw & Mfg. Co. .. 99
National Tool Co. 26
New Hermes, Inc. 7
New Jersey Machine Corp. ... 102
N. Y. Belting & Packing Co. 44
New York Blower Co. 100
Newcomb Spring Corp. 7
Nice Ball Bearing Co. 73
Nicholson, W. H., & Co., ... 17
Nicholson File Co. 77
Northern Engineering Works . 64
Northwest Chemical Co. 9
Norton Co. 27
Nu-Matic Grinders, Inc. 12

O

Ohio Brass Co. 76
Ohio Gear Co. 109
Olson, Samuel, Mfg. Co. ... 42
O'Neil-Irwin Mfg. Co. 29
Onox, Inc. 4
Orr & Sembower, Inc. 59
Ortman-Miller Machine Co. .. 88
Osborn Mfg. Co. 44
Oster Mfg. Co. 106

P

Paddock Tool Co. 34
Page Steel & Wire Div. 13
Palley Supply Co. 55
Palnut Co. 20
Paltier Corp. 63
Pangborn Corp. 26, 66, 67
Pannier Corp. 41
Parker Sweeper Co. 74
Parks-Cramer Co. 6
Patterson-Kelley Co. 9
Peck & Harvey 18
Peerless Electric Co. 99
Pekay Machine & Engineering Co. 49
Penberthy Injector Co. 45
Penn Metal Corp. of Penn'a. . 90
Pereny Equipment Co. 20
Perfection Gear Co. 40
Philadelphia Textile Finishers, Inc. 5
Phillips Mfg. Co. 37
Pike, E. W., & Co. 108
Pine, William S. 6
Pines Engineering Co. 109
Pioneer Rubber Co. 32
Pittsburgh Plate Glass Co. .. 62
Pneu-Trol Devices, Inc. 90
Polyken Industrial Tapes, Dept. of Bauer & Black .. 99
Powers Regulator Co. 67
Precise Products Co. 14
Prime-Mover Co. 78
Production Instrument Co. .. 90
Progressive Mfg. Co. 73
Pulverizing Machinery Co. .. 94

Q

Quincy Compressor Co. 94
Quinn Bros., Inc. 57

R

R-B-M Div., Essex Wire Corp. 59
R. C. S. Tool Sales Corp. ... 44
Randall Graphite Bearings, Inc. 60
Rapids-Standard Co. 83
Raymond Corp. 96
Raytheon Mfg. Co. 9
Reading Crane & Hoist Corp. 82
Reed Unit-Fans, Inc. 6
Reliance Electric & Engrng. Co. 43
Research Products Corp. 108
Reuland Electric Co. 10
Rhodes, M. H., Inc. 24
Richards, J. A., Co. 48
Ridge Tool Co. 79
Rivett Lathe & Grinder, Inc. 60
Robbins, Omer E., Co. 12
Robbins & Myers, Inc. ....+1, 74
Roberts, Weldon, Rubber Co. 92
Rockford Clutch Div. Borg-Warner ..... [illegible]
Rock-Tred Corp. 108
Rockwood Sprinkler Co. ..19, 103
Rodgers Hydraulic, Inc. 86
Roller Bearing Co. of America 3
Roper, Geo. D., Corp. 96
Roto-Finish Co. 98
Rotor Tool Co. 13
Royal Metal Mfg. Co. 112
Roylyn, Inc. 98
Ruberoid Co. 25
Ruby Chemical Co. 71
Ruemelin Mfg. Co. 55
Rynel Corp. 15

S

SKF Industries, Inc. 108
Sabin Machine Co. 13
Sage Equipment Co. 3
St. Anthony Machine Products Co. 72
Sarco Co. 70
Schirmer-Dornbirer Pump Co. 60
Schrader's A., Son 32, 71
Schramm, Inc. 47
Schutte & Koerting Co. 43
Scintilla Magneto Div., Bendix Aviation Corp. 103
Security Locknut Corp. 104
Service Machine Co. 106
Sexauer, J. A., Mfg. Co. 50
Shafer Bearing Corp. 12
Shakeproof, Inc. 49
Sheldon Machine Co. 92
Shenango-Penn Mold Co. 28
Sherwin-Williams Co. 87
Sier-Bath Gear & Pump Co. . 76
Simonds Machine Co. 104
Simplicity Engineering Co. ... 29
Skinner Electric Valve Div., Skinner Chuck Co. 13
Sly, W. W., Mfg. Co. 27
Smooth-On Mfg. Co. 43
Sommer Metalcraft Corp. ... 86
South Bend Lathe Works ... 34
Speed Selector, Inc. 101
Spencer Thermostat Div., Metals & Controls Corp. 27
Spencer Turbine Co. 58
Sperry Products, Inc. 94
Spo Inc. 53
Sprague Engineering & Sales Corp. 5
Spray Engineering Co. 78
Spraying Systems Co. 38
Sprout-Waldron & Co. 48
Square D Company 32, 73
Stackbin Corp. 81
Stalwart Rubber Co. 13
Standard Conveyor Co. 72
Standard Pressed Steel Co. .41, 79
Stanley Tools 38
Stanley Works, The 61
Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co. 104
Star Stainless Screw Co. 109
Sta-Warm Electric Co. 55
Stearns Magnetic, Inc. 113
Stephens-Adamson Mfg. Co. .8, 9
Sterling Electric Motors 27
Sticht, Herman H., Co. 96
Stonhard Co. 111
Stow Mfg. Co. 51
Sturtevant Mill Co. 69
Sunnen Products Co. 8
Super Tool Co. 86
Superior Electric Co. 46
Superior Tube Co. 62
Surety Rubber Co. 104
Sutton Mfg. Corp. 67
Synthane Corp. 39
Syntron Co. 8, 28, 59, 75, 96

T

Tabor Mfg. Co. 47
Tal Bender, Inc. 62
Taylor Fibre Co. 82
Taylor-Winfield Corp. 53
Teleflex, Inc. 23
Tempil Corp. 79
Tennessee Coal & Iron Div. .. 80
Termite Drills, Inc. 93
Thermo Electric Mfg. Co. ... 38
Thomas & Betts Co. 39
Thomas Truck & Caster Co. 62
Thompson, H. I., Co. 107
Thompson Electric Co. 17
Thomson Industries, Inc. ... 84
Tilden Tool Mfg. Co. 51
Tile-Tex Div., Flintkote Co. 47
Titeflex, Inc. 108
Tokheim Oil Tank & Pump Co. 22
Toledo Pipe Threading Machine Co. 67
Toledo Scale Co. 34
Tomkins-Johnson Co. 18
Towmotor Corp. 107
Towsley Trucks, Inc. 67
Trabon Engineering Corp. .. 89
Transall, Inc. 33, 84
Tremco Mfg. Co. 17
Trerice, H. O., Co. 3
Tri-Saw Corp. 41
Tropical Paint & Oil Co. ... 45
Truck-man Div. of Knickerbocker Co. 40
Trumbull Dept., General Electric Co. 27
Truscon Steel Co. 63
Turner Uni-Drive Co. 21
Tuthill Pump Co. 13

U

Ullman Products Corp. 26
Union Carbide & Carbon Corp., Bakelite Co. 21

Union Metal Mfg. Co. 56, 57
United Electric Controls Co..29, 68
United Laboratories, Inc. 8
United Mfg. Co. 104
U. S. Electrical Motors, Inc. . 91
United States Gasket Co. ... 49
U. S. Industrial Glove Corp. . 11
United States Steel Co. 33, 80
U. S. Steel Export Co. 80
U. S. Steel Subsidiaries 80
U. S. Steel Supply Div. 80
U. S. Stoneware Co. 78
Universal Drafting Machines Corp. 50
Universal Engineering Co. ... 90
Universal Metal Hose Co. 47

V

V & E Mfg. Co. 71
Valvair Corp. 2
Vanton Pump Corp. 15
Varflex Sales Co. 26
Veeder-Root, Inc. 64
Vulcan Electric Co. 74

W

Wachs, E. H., Co. 93
Walton Co. 7
Ward Leonard Electric Co. .. 16
Warner Div., Clinton Machine Co. 40
Warner Electric Brake & Clutch Co. 45
Waterloo Valve Spring Compressor Co. 101
Waterman Engineering Co. ... 105
Watlow Electric Mfg. Co. ... 37
Watson-Stillman 19
Wayne Pump Co. 57
Weatherhead Co. 77
Webb, Jervis B., Co. 7
Webber Appliance Co. 56
Wells Mfg. Corp. 95
West Bend Equipment Corp. . 100
West Disinfecting Co. 81
Western Lithograph Co. 74
Westinghouse Air Brake Co. . 82
Westinghouse Electric Corp..22, 71
Weston Electrical Instrument Corp. 42
Wheeler Insulated Wire Co. .. 87
Wheeler Reflector Co. 64
Wiegand, Edwin L., Co. .4, 14, 83
Wiggins, E. B., Oil Tool Co. . 66
Willson Products, Inc. 13
Wilshire Power Sweeper Co. . 101
Wing, L. J., Mfg. Co. 107
Wire Rope Sling Dept., Amer. Chain & Cable 16
Woods, John J., & Sons 43
Worthington Corp. 21
Wright Hoist Div., Amer. Chain & Cable 15

Y

Yale & Towne Mfg. Co. 19
Yarnall-Waring Co. 42, 67

Z

Zallea Brothers 25

Index to Products

A

Abrasive Products..27, 41, 63, 78, 92, 99, 100, 102, 105, 107, 108
Air Conditioning 26, 107
Alarms 11, 95
Alloys, Special Purpose 5, 85, 87, 97
Axle Assemblies 104

B

Balancing Machines 79
Balls 94
Barriers, Parking 19
Batteries, Storage 63, 71
Battery Charger 85
Bearings.....3, 8, 12, 50, 54, 60, 63, 69, 73, 77, 93, 97, 108
Bellows 40
Belt Fasteners.....11, 93
Belting.....40, 65, 97, 102
Belts, Conveyor 30, 45, 48, 89, 95, 101
Bender.....19, 29, 48, 62, 109
Bins & Boxes ..51, 53, 57, 64, 73, 85, 99, 101
Brakes 45
Brazing Materials 106, 107
Broaching Equipment 101
Brushes....24, 34, 44, 48, 62, 109
Buckets, Crane 101
Bushings, Drill 106

C

Camera, High Speed..... 31
Capacitors 4
Car Door Opener 35
Car Spotter 55
Cases 23, 84, 101
Casters 14, 22, 86
Castings 28, 79, 98
Cements, Repair 4, 42, 93
Chains 7, 34, 62
Chairs 30, 69, 112
Chucks 2, 90, 111
Chucks, Magnetic 21, 25
Clamping Devices 2, 4, 17, 65, 87, 88, 105
Clamps, Lifting 24, 81, 88
Cleaners, Air 5, 96, 100
Cleaners, Tube 28
Cleaners, Vacuum....3, 54, 58, 60
Cleaning Equipment, Blast..38, 66
Cleaning Machines 1, 31, 37, 45, 54, 74, 96
Cleaning Materials 9, 47, 93
Clutches 45, 68, 74
Coating Machines 22
Coatings, Protective 18, 28, 78, 81, 86, 88, 90, 92, 94, 99, 104
Coils 97
Communications Equipment.87, 108
Compressors, Air 15, 19, 47, 75, 83, 94
Condensation Preventive...52, 112
Controls, Air & Hydraulic....2, 11, 13, 29, 55, 71, 85, 99
Controls, Duplicating 7
Controls, Electric 1, 23, 27, 32, 45, 56, 59, 61, 71, 82, 83, 96, 98, 104, 106
Controls, Level.....28, 45, 106
Controls, Remote.20, 23, 58, 84, 94
Controls, Temperature & Pressure...3, 18, 27, 29, 33, 38, 46, 47, 50, 58, 67, 68, 70, 100, 102
Conveyor Accessories ...7, 10, 26, 33, 46, 49, 84, 110
Conveyors.3, 4, 12, 17, 20, 25, 29, 33, 34, 37, 40, 42, 56, 57, 66, 72, 75, 83, 94, 96, 106, 107, 110
Counting Devices 1, 49, 64, 90, 106
Couplings, Flexible 76, 78, 88
Covers, Vault 93
Crane Accessories 84
Cranes.....12, 41, 64, 102
Crushers 69
Cutter, Metal.5, 32, 36, 37, 43, 48
Cylinders, Air & Hydraulic..16, 29, 32, 55, 58, 60, 78, 88, 90

D

Dampers 11
Deburring Equipment 96
Dehumidifiers 71
Die Accessories 71
Dies 106
Dies, Adjustable 72
Disintegrator 40
Door Operator 59
Doors, Industrial 11, 70
Drafting Equipment 21, 31, 50, 68, 71
Drill Chip Breaker 85
Drill Heads, Adjustable 1, 85
Drilling Attachment, Deep Hole 85
Drilling Machines.....6, 32, 39, 52, 56, 67, 75, 102, 107
Drills.....51, 93, 112
Drives, Machine 10, 20, 27, 75, 82, 91, 100, 104
Drives, Variable Speed 36, 56, 80, 91, 101
Duplicating, Dieless 29
Dust Collectors 17, 27, 31, 50, 57, 61, 64, 66, 67, 96

E

Elevating Equipment 5, 6, 12, 15, 39, 78, 96
Engines, Diesel 64
Engines, Gasoline 13, 19
Engraving Machines 7
Envelopes, Transparent 87

F

Fabrics 5
Fans & Blowers 3, 4, 19, 37, 46, 48, 50, 65, 67, 97, 100, 102, 104, 107, 111
Fastening Devices 3, 16, 17, 20, 47, 49, 52, 56, 69, 70, 73, 76, 79, 81, 83, 84, 98, 99, 104, 105, 106, 109, 112
Feeders, Stock 9, 30, 48
Feeders, Vibratory 4, 59
Fences 13
Files 77
Filtering Equipment 5, 37, 73, 89, 105, 106, 108
Finishes....18, 43, 66, 87, 93, 100
Finishing Equipment 96
Finishing Equipment, Blast.26, 66
Finishing Equipment, Spray..55, 108
Fire Extinguishing Equipment 44, 62, 65, 95, 103
Flexible Shaft Machines..... 51
Floor Machines....32, 50, 74, 108
Flooring Materials ..6, 8, 15, 31, 38, 43, 82, 90, 94, 95, 100, 105, 107, 108, 109, 112
Freezers, Industrial 56
Furnaces, Industrial....10, 20, 66
Fuses.....38, 46, 69

G

Gages, Precision 67, 72, 77, 80, 83, 91
Gages, Pressure & Temperature 62
Gearing....15, 27, 40, 82, 103, 109
Generators, Steam 18, 59
Glass Products 52
Gloves, Industrial 11, 37, 42, 104, 108
Gloves, Neoprene 32
Goggles 40, 83
Grinders, Tool & Cutter..... 103
Grinding Accessories.....1, 8, 12
Grinding Machines 14, 19, 23, 29, 39, 43, 45, 50, 94

H

Hammers & Mallets 53
Heat Treating Equipment 105
Heaters, Compound 26, 55, 61
Heaters, Electric 4, 8, 14, 30, 37, 83, 87
Heaters, Electronic 79
Heaters, Induction 62
Heaters, Unit .31, 70, 79, 99, 107
Heating Equipment ..24, 102, 103
Hoists ..9, 15, 22, 64, 82, 90, 102
Honing Equipment 6
Hose & Fittings 10, 25, 30, 57, 77, 85, 98, 106
Hose, Flexible Metal 47, 108

I

Indicators, Bin Level 97, 112
Indicators, Temperature 79
Insect Control 81, 86
Inspection Equipment 8, 12, 26, 42, 54, 74, 88, 104, 108
Instruments, Electric 35, 46, 50, 90
Insulation, Electric 16, 26, 52, 82, 89, 107, 109
Insulation, Thermal 95, 107

J

Jacks 3, 19, 25, 33, 59
Jacks, Leveling 68
Jigs & Fixtures 4, 17, 70, 100
Joints, Rotating 97

K

Keyseater 89

L

Labels 39, 72, 96
Laboratory Equipment 64
Ladders 28
Laminated Materials 61, 82
Lighting Equipment 47, 50, 64, 69, 112
Lights, Pilot 44
Lockers & Shelving 90
Lubricants 6, 51, 88
Lubricating Equipment ..1, 60, 89

M

Machine Tools 1, 15, 17, 29, 34, 58, 78, 92, 98, 102, 106, 109
Machine Tool Accessories 7, 9, 13, 23, 30, 39, 63, 75, 112
Magnetic Equipment 10, 39, 73, 112
Management 77, 99
Marking Equipment .2, 9, 24, 30, 41, 60, 65, 74, 86, 96, 105, 110
Masks 102, 112
Materials Handling Equipment 20, 24, 26, 29, 32, 33, 35, 53, 56, 57, 63, 64, 65, 81, 88, 99
Materials Handling, Overhead 53, 60, 68
Mats, Floor 82
Metallizing Equipment 86
Meters, Flow 36, 55, 65, 73
Meters, Tong Test 65, 76
Mills 69
Mixing Equipment 9, 10, 29, 70, 105
Models 80
Motors, Air 75
Motors, Electric 2, 10, 22, 27, 43, 45, 53, 71, 75, 88, 97, 99, 104, 109

N

Nozzles, Spray 6, 38, 78

O

Office Equipment 2, 43, 62, 68, 77, 86, 101
Ovens, Industrial 80

P

Packaging Equipment & Materials 5, 7, 36, 44, 58, 75, 80, 82, 88, 93, 100
Packings & Gaskets 21, 44, 70, 90, 92, 106
Parts, Precision 107, 108
Photographic Equipment ...4, 18
Pipe & Fittings 2, 6, 25, 35, 56, 60, 62, 87, 108, 110
Pipe Joint Compound 46, 76
Pipe Tools & Machines 48, 51, 58, 60, 67, 79, 99
Placement Equipment, Materials 98
Plastics 39, 40, 51, 82, 91, 92, 94, 95, 97, 109
Plating Equipment 98, 103
Plywood 93
Power Units, Electric 78, 104
Power Units, Hydraulic 5, 6, 19, 29, 55
Presses 3, 16, 23, 24, 25, 28, 30, 48, 51, 53, 55, 66, 73, 86, 103, 112
Presses, Molding 101
Process Equipment 97
Production Facilities ..80, 97, 105
Pullers 25, 33, 36
Pulleys & Sheaves 2, 14, 21, 46, 56
Pumps 9, 10, 20, 23, 24, 25, 29, 35, 37, 38, 43, 60, 66, 72, 79, 84, 95, 96, 100, 108
Pumps, Chemical 15, 80, 84
Pumps, Air & Vacuum 38, 45, 102
Punches 44

R

Racks 18, 33, 96
Ramps 33, 39, 54
Recorders, Industrial 62, 85
Rectifiers 104
Reels, Hose 57
Reels, Stock 54
Refrigeration Equipment ..41, 50
Regulators, Voltage 2, 71
Relays 2, 14, 16, 30, 34, 49, 84, 98
Reproduction Equipment 1, 13, 18, 47, 63, 68, 89
Resistors 40, 57, 70
Respirators 8, 13, 54
Rheostats 16, 76
Riveting Equipment 18
Rolls 31, 66
Roofing ..25, 93, 98, 103, 107, 111
Rubber Products 15, 21, 31
Rubber, Synthetic 51
Rules 30, 81
Rust Preventives 49

S

Safety Equipment 4, 26, 38, 39, 56, 74, 76, 77, 82, 91, 106
Saw Accessories 34, 77
Saw Blades 14, 24, 100
Saws, Metal & Wood 5, 6, 14, 21, 39, 41, 44, 53, 61, 76, 83, 95, 98, 105
Scaffolds 66
Scales 34, 49, 69
Screening Equipment ..52, 63, 69
Screwdriver, Power 35
Seals 44, 98, 105
Shears 19, 32, 35, 48, 84
Shop Equipment 35, 41, 49, 57, 64, 78, 82
Slings 16, 96
Soldering Equipment 8, 38, 71, 84, 80, 106, 112
Speed Reducers 9, 22, 35, 49, 81, 102, 103, 109
Spray Equipment ...6, 36, 38, 78
Springs 7, 85
Stampings 42, 80, 99
Stapling Equipment 38, 57
Steel 85
Steel, Tool 37, 101
Stitcher, Wire 2
Strainers 47, 67
Strapping, Steel 33, 61
Stripper, Wire. 36, 87
Strip, Prefinished Metal ..11, 109

T

Tables 64
Tacker, Hand 18
Tachometers 8
Tape Dispenser 61
Tape, Industrial 21, 89, 99
Tapping Attachment 85
Telephone Booths, Acoustic 9, 52
Testing Equipment 10, 19, 20, 22, 26, 27, 33, 41, 42, 43, 46, 59, 64, 72, 74, 89, 96, 98, 101
Thermometers 3, 22, 62
Timing Devices 1, 2, 24, 30, 34, 49, 50, 74, 80
Tires, Industrial 12, 36, 107
Tools, Carbide 52, 86, 95, 102
Tools, Cleaning 11
Tools, Cutting 75
Tools, Pneumatic 13, 21, 77
Tools, Portable Electric 4, 13, 14, 21, 112
Tractors, Industrial 47, 92
Transformers 94
Traps, Air 70
Traps, Steam 3, 17, 42, 72
Trucks, Hand 5, 13 53, 54, 58, 62, 67, 100, 105, 112
Trucks, Industrial Power 7, 16, 19, 40, 53, 61, 76, 78, 90, 95, 98, 100, 107
Tube Fabricating Equipment 81, 109
Tubing & Fittings 36, 63, 66, 72, 77, 85, 94, 109

V

Valves ..5, 6, 19, 22, 28, 34, 36, 41, 49, 76, 82, 88, 92, 97, 108
Vending Machines 21
Ventilating Equipment 74, 106
Vibration Absorbers 17, 68
Vibrating Equipment 8, 28, 47, 55
Vises 61

W

Washers 104, 105
Washers, Faucet 50
Washroom Equipment 4, 7, 65, 67, 103
Water Cooler 103
Waterproofing Material 17, 87, 89, 91, 99
Welders, Electric 9, 28, 42, 52, 55, 84, 91
Welding Accessories 14, 55, 69, 75, 91, 98, 103, 108
Welding & Cutting, Gas 76
Wheels, Industrial 80
Winches 35, 72
Wire Cloth & Screens 86
Wire, Electric 5, 12, 91
Wire Specialties 42, 86
Wiring Accessories 3, 5, 16, 31, 39, 46, 59, 68, 73, 81, 96, 103, 104, 109
Wrenches 79

NEW EQUIPMENT DIGEST

EQUIPMENT · MATERIALS · PROCESSES · DESIGNS · APPLICATIONS · LITERATURE

NBP CCA

Penton Building, Cleveland 13, Ohio

A. N. GREGG.....Editor
H. J. HOLTZ.....Assoc. Editor
GEO. SOTAK JR.....Ass't. Editor
J. W. CLOSE.....Circulation Mgr.
F. O. RICE.....Publisher
WALTER STAAB...Adv. Service Mgr.
A. BUGOSH.....Sales Prom. Mgr.
HAZEL DAVIS..Adv. Production Mgr.

ADVERTISING REPRESENTATIVES

Cleveland 13 .....L. H. WEBER, G. B. GUEST, M. E. OLSON
Penton Building, Main 1-8260

Chicago 11 ..J. H. ROBISON, W. J. LOWITZ, J. M. WELLS
520 N. Michigan, Whitehall 4-1234

New York 17.....B. R. BAKER, G. M. BERNARD
60 E. 42nd St., Murray Hill 2-2581

Philadelphia .....V. W. VOLK
7 N. Drexel Ave., Havertown, Pa., Hilltop 6-3199

Los Angeles 4 .....F. J. FULLER
6262 Commodore Sloat Drive, Webster 1-6865

Griffin, Ga. .....FRED J. ALLEN
331 S. Twelfth St., Griffin 7854

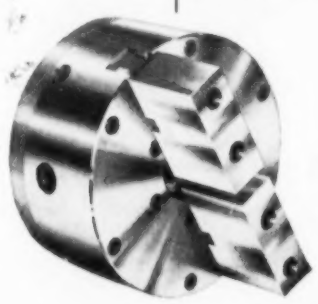
New Equipment Digest is published monthly by Equipment Digest Publishing Co., Penton Building, Cleveland 13, Ohio; G. O. Hays, President; F. O. Rice, Vice President & Secretary; J. R. Dawley & J. H. Robison, Vice Presidents; E. L. Shaner, Treasurer

Publisher's Notice: We assume no responsibility for the validity of claims in connection with news items appearing in New Equipment Digest. Addresses are given to facilitate further inquiry.

JUNE, 1952

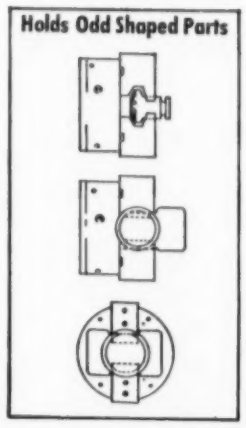
▲ For more details circle **NED-6040** on enclosed inquiry slip ▲

Buck ADJUST-TRU CHUCKS



NEW 2-JAW AVIATION CHUCK

Holds Odd Shaped Parts



THIS is the slickest way ever devised to hold irregular shaped parts for duplicate machining operations within *.0005 precision.*

The master jaws have *soft* top jaws which you machine to hold your specific work, then harden if you wish. That's not new. But the way the Adjust-Tru principle saves time on accurate rechucking is truly amazing. The jaws move in and out simultaneously to grip the work with a *single-pinion* action — just like any scroll chuck.

You make but one adjustment for precision when you start your run — then re-chuck with scroll chuck speed without further adjustment.

Ask for a catalog with full details.

BUCK TOOL COMPANY
622 Schippers Lane
KALAMAZOO, MICHIGAN

▲ For more details circle **NED-6041** on enclosed inquiry slip ▲

WATCHMAN PHONES HIS BOSS 3 A.M.

"Roof Building #17 Leaking!"

IF THIS HAPPENS TO YOU TELL HIM TO GET THAT DRUM OF

STONHARD ROOF RESURFACER

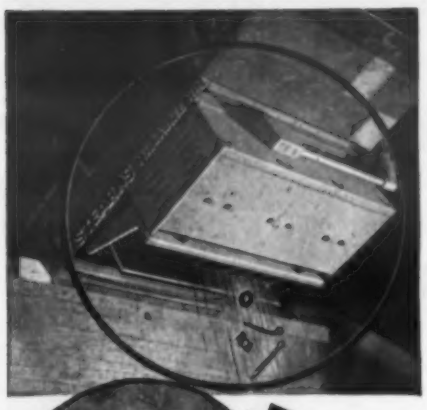
FROM THE STOCKROOM

If it's not in your stockroom—get it there *quick!* Seasonal rains cause sudden leaks, and a drum or two of STONHARD ROOF RESURFACER *on hand* will safeguard you against damage to materials, merchandise and equipment. STONHARD Liquid or Plastic ROOF RESURFACERS bond securely to *any type roof* and can be easily applied, even by your night watchman. No heating or mixing of ingredients. Simply brush or trowel on. They will not run, sag, crack or peel. For complete details, mail the coupon below *today.*

STONHARD COMPANY
Building Maintenance Materials Since 1922
101 Stonhard Bldg., 1306 Spring Garden Street, Phila. 23, Pa.

Yes, I want details on STONHARD ROOF RESURFACERS 101/6/52
Name .....
Company ..... Title .....
Address .....
City ..... Zone ..... State .....

▲ For more details circle **NED-6042** on enclosed inquiry slip ▲



PROTECT YOUR MACHINERY!

Just four hours of operation recovered this amazing amount of tramp iron at the Fleischmann Malting Company with a Stearns Electro-Magnetic Spout Type Separator. Protect your machinery, avert possible shut-downs and costly repairs — remove all the tramp iron with a Stearns separator.

For complete specifications and operating data on Stearns Electro and Permanent Magnetic Spout Type Separators, write for bulletins.

Foremost in the Magnetic Field
Stearns MAGNETIC INC.
653 South 28th Street Milwaukee 46, Wis.

For more details circle NED-6043 on enclosed inquiry slip

TINS ALL METALS

Difficult tinning problems are being solved with a new powdered solder containing flux, called Farco Tinning Compound which permits jobs heretofore considered impossible, such as tinning cast iron water jackets and cylinder heads, cast steel bearings, pipes, cylinders and stainless steel equipment. The powerful chemical formula will lift the oxides from aluminum, and on other metals is more drastic than ordinary acids. Makes it possible to lift the scale and tin black iron in one operation. Stability of the new powder makes it possible to judge heat on large bearings by its action in turning liquid when proper temperature for tinning is reached. Although strong enough to remove scale, dirt, and tin rusty surfaces thoroughly, it does not produce harmful fumes nor will it burn the skin. When used on gasoline motors, Diesel and marine engine bearings it is reported to increase performance life 100%. The compound may be applied with either torch or soldering iron depending on thickness of metal, and any good grade of solder may be used. Packaged in 1½ lb. cans, price $3.00 f.o.b. *Advt.*

FARRELLOY CO.

1246 North 26th St. Phila. 21, Pa.

For more details circle NED-6044 on enclosed inquiry slip

NoDrip ...STOPS CONDENSATION DRIP!

NoDRIP PREVENTS RUST in addition to stopping drip and keeping floors dry.

ANYONE CAN APPLY

Brush, trowel or spray NoDrip on tanks, condensers, suction lines, vats, pipes, walls, ceilings, etc. NoDrip adheres to metal, concrete, brick, plaster. It forms a seamless covering that is effective as soon as dry. Acid, alkali and brine resistant.

Interesting 32-page Handbook shows what NoDrip is and what it does. It's free. Send coupon today.

☐ SEND NoDRIP HANDBOOK

NAME_____

ADDRESS_____

CITY_____ STATE_____

J. W. MORTELL CO., 526 BURCH ST., KANKAKEE, ILLINOIS

TECHNICAL COATINGS SINCE 1895

For more details circle NED-6045 on enclosed inquiry slip

New Literature & Catalogs

Spray Finishing Masks

Conforming Matrix Corp.—"Electro-Formed Spray Painting Masks" is title of 6-page illustrated folder which gives details on masks designed for mass production color decoration of all types of products. Also covered are foot treadle and air operating masking fixtures, fully automatic spray painting equipment, mask washers and air operated clamps, fixtures and tools.

For more details circle NED-6046 on enclosed inquiry slip

Adjustable Face Plate

Micro Lathe Plate Co.—Details of complete line of Micro lathe work-holding attachments are given in 6-page illustrated folder. Over 200 different uses of these units on lathes, drill presses, milling machines, grinders, shapers and boring mills are shown.

For more details circle NED-6047 on enclosed inquiry slip

Bin Level Indicators

Bin-Dicator Co.—Level of granular and pulverized materials stored in tanks, silos, hoppers and bins can be indicated by line of bin level indicators described and illustrated in 1952 catalog, "The Eyes of the Bin." They also actuate signals and operate machinery. Installation data are given.

For more details circle NED-6048 on enclosed inquiry slip

Metalworking Data

E. W. Bliss Co.—52-page illustrated revised edition of "Computations for Metal-Working in Presses" is compilation of engineering data to aid in computing pressure capacity and sustained work capacity of various mechanical and hydraulic presses. Series of alignment diagrams simplifies application of formulas.

For more details circle NED-6049 on enclosed inquiry slip

Industrial Fasteners

Connecticut Screw & Rivet Co.—Selecting and pricing of line of industrial fasteners is simplified in the 1952 catalog. Die cut marginal index of this bulletin leads to data on steel machine, brass machine, Phillips machine and self-tapping sheet metal screws, as well as plating extras, dimensions and stove bolts.

For more details circle NED-6050 on enclosed inquiry slip

Directional Lighting

Gruber Bros. Inc.—"Exit and Directional Lighting" is subject of 8-page illustrated bulletin that describes 31 types of lighted signs for use in industrial plants, offices, public buildings and institutions.

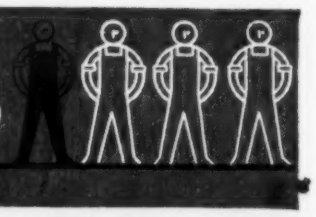
For more details circle NED-6051 on enclosed inquiry slip

Carbide Drilling of Cast Iron

General Electric Co., Carboloy Dept.—Detailed instruction on how to drill cast iron with carbide tipped twist drills, and results of such drilling, are included in brochure.

For more details circle NED-6052 on enclosed inquiry slip

triple your "men-power"



with this LOW COST STUEBING ENGINEERED TRUCK.... Triple your power—but not your payroll—with the truck your men prefer. Fleet owner studies prove it pays for itself in the first three months. Unusual ease of operation make it labor's favorite. Easy lift, automatic action, positive safety. Machine bolted frames; all parts machined and standardized. Timken bearinged steering column.

For full details on the Red Arrow (single-stroke) or the Hydromatic (multi-stroke) send for Bulletin "G".

LIFT TRUCKS, INC.
Walter Stuebing, President
2425 Spring Grove Ave. Cincinnati 14, Ohio

For more details circle NED-6053 on enclosed inquiry slip

new! Black & Decker #12 SCRUGUN*

only $59.50

50% MORE POWER

That's what this speedy, new B&D SCRUGUN has to boost its capacity from #10 to #12 wood screws! And it also gives you a new handle shaped for plenty of finger room—light weight (only 3¾ lbs.), and amazing compactness (only 9" overall) to cut fatigue—husky, high-quality parts for *continuous* operation! See your nearby B&D Distributor for a demonstration. WRITE FOR FREE LITERATURE to: The Black & Decker Mfg. Co., 662 Pennsylvania Ave., Towson 4, Md.

LEADING DISTRIBUTORS EVERYWHERE SELL

Black & Decker PORTABLE ELECTRIC TOOLS

* Trade Mark Reg. U. S. Pat. Off.

For more details circle NED-6054 on enclosed inquiry slip

CAN YOU AFFORD NOT TO GIVE YOUR WORKERS PROPER Seating?

A tired worker costs MUCH more than a GOOD CHAIR

Royal's 515 STOOLS WILL HELP KEEP YOUR WORKERS AT PEAK EFFICIENCY...

Resulting in More Work Produced per Man Hour and Lower Actual Costs per Chair.

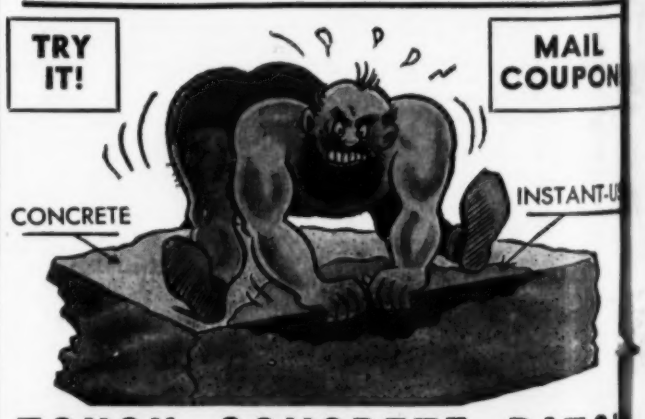
- STURDY MASONITE INSERT IMBEDDED IN SEAT PAN.
- LEG EXTENSION FOR EASY HEIGHT ADJUSTMENT.
- ADJUSTABLE BACKREST.
- OVEN BAKED GREY ENAMEL FINISH.

60 DAY Free TRIAL examine it... test it... use it without obligation

ROYAL METAL MFG. CO.
175 NORTH MICHIGAN AVENUE
CHICAGO 1, ILLINOIS

For more details circle NED-6055 on enclosed inquiry slip

TRY IT! MAIL COUPON



TOUGH CONCRETE PATCH

Sets Instantly!

Repair broken factory floors without the usual traffic tie-up. Simply shovel INSTANT-USE into hole or rut—tamp smooth—truck over! No waiting! INSTANT-USE bonds tight to old concrete—right up to a feather edge. It's tough. Wears like iron. Won't crack or crumble. Install complete overlay where floors are badly chewed up. Used indoors or out. Immediate shipment.

MAIL COUPON FOR TRIAL OFFER AND FREE HANDBOOK

INSTANT-USE

FLEXROCK COMPANY (Offices in principal cities)
3603 Filbert St., Philadelphia 4, Pa.

Please send me complete INSTANT-USE information, details of TRIAL ORDER PLAN and HAND BOOK OF BUILDING MAINTENANCE—no obligation. (Clip and attach Coupon to Co. letterhead).

Name .....

Title .....

Company .....

Address .....

For more details circle NED-6056 on enclosed inquiry slip